1983

A Taxonomy for Industrial Salesforce Job Activities.

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A TAXONOMY FOR INDUSTRIAL SALESFORCE JOB ACTIVITIES

The Louisiana State University and Agricultural and Mechanical Col. PH.D. 1983

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A TAXONOMY FOR INDUSTRIAL SALESFORCE JOB ACTIVITIES

A Dissertation

Submitted to the Graduate Faculty of the
Louisiana State University and
Agricultural and Mechanical College
in partial fulfillment of the
requirements for the degree of
Doctor of Philosophy

in

The School of Business Administration

by

William C. Moncrief
University of Mississippi, 1975
MBA - University of Mississippi 1978
December 1983

ACKNOWLEDGMENTS

My sincere thanks and appreciation go to the members of my dissertation committee, Dr. Ronald F. Bush, Dr. Joseph F. Hair, Dr. Alvin C. Burns, Dr. Dan Sherrell, and Dr. Robert Mathews. The results of their insights and constructive criticisms were invaluable in this project.

I am deeply grateful to Doctors Hair and Burns who have worked with me throughout my entire Ph.D. program. They have been very valuable in my education and direction through the program.

A special thanks to Dr. Sherrell, who having recently completed his dissertation, was especially helpful in preparing me for the early part of the dissertation work with advice and encouragement.

Dr. Mathews of the Psychology department provided me with some direction in the taxonomy literature and was also very helpful in the Ph.D. program; both from a classroom perspective and in some writing endeavors.

I am especially grateful to Dr. Ronald Bush who suggested that I enter into the Ph.D. program, and was instrumental in my completion of the degree. Dr. Bush was always there to encourage, prod and keep me moving in a positive direction. His guidance and friendship was deeply appreciated.

I would also like to acknowledge the various contributions of several people who were helpful in various stages of the research. These people are Sharon Grimes, Mike Laughner, Dave Finn, and Vernon Parenton.

I am also indebted to Mrs. Joy Perry and Lee Pettersen for their patience, tireless work, and hours they put in typing on the dissertation project.

My thanks also go to the 51 companies who allowed me to survey their salesforce and in some cases provided expense money. I would also like to thank Dr. Charles Lamb, Dean Edward Johnson and Associate Dean Larry Miller of Texas Christian University for their patience and the aid they provided.

A special thanks go to my parents, my in-laws, and my friends whose prayers, thoughts, and concerns were with me during the dissertation period.

Finally, my greatest thanks go to my wife, Sheila, who not only supported me mentally and emotionally, but who also spent long hours working with me in the administration of the dissertation.

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Master of Business Administration, 1978

Doctor of Philosophy, Fall Commencement, 1983

Major: Marketing - Minor: Social Psychology

A Taxonomy For Industrial Salesforce Job Activities

Dissertation directed by Professor Ronald F. Bush

Pages in Dissertation, 386. Words in Abstract 324.

ABSTRACT

A taxonomy developed of specific selling activities of industrial salespeople was developed to differentiate "types" of salespeople. The taxonomy was developed based on the responses of 1393 salespeople from 51 companies to a survey of the frequency with which they performed activities, and the time spent to perform each activity.

The first stage of the research was the compilation of an exhaustive list of sales activities. These activities were collected from a series of focus groups and personal interviews.

The questionnaire was formulated based on the 121 sales activities collected from the focus groups. Two scales were designed and implemented to determine the frequency of each activity and the average amount of time the activity took to perform.

The sample was designed following the categories of industries found in the Standard Industrial Classification, which is a government publication that classifies all companies according to type of product.

Eight hundred letters of cooperation were mailed in a systematic stratified sample. Initial response was received from 85 companies of which 51 agreed to all the requirements of the study.

The analysis consisted primarily of a factor analysis of sales activities, followed by a clustering of salespeople based on their answers to the 121 activities. Analysis of variance merged the clustered groups with the factored activities, such that each cluster could be identified in terms of the activities that they performed. Lastly, each cluster group was identified in terms of their demographic profile, company and SIC representation.

The results of the frequency scale produced 10 categories of salespeople based on their job activities. Of the ten categories, three were technical in nature. The description of the ten categories indicated some similarity to previous theories, while uncovering new, previously undiscussed categories.

The time scale produced nine clusters of salespeople based on the amount of time salespeople spend in performing activities. These clusters or categories were similar in part to the frequency scale, though some differences were noted.

CHAPTER ONE

INTRODUCTION

The sales management literature in the past decade has begun to focus on the organizational climate in an industrial setting. Empirical research has been conducted in various industrial settings with results generalized to "salesmen" and ignoring possible differentiation among "types" of salespeople.

PURPOSE OF THE STUDY

The purpose of this dissertation research is to determine if there exists a logical and theoretically plausible classification of specific selling activities of industrial salespeople and, if so, to develop a taxonomic system to differentiate "types" of salespeople. It has been well documented in the philosophy of science literature that the classification of phenomena is essential if academicians are to attain adequate scientific explanation. Marketing, as a relatively young discipline, is lacking in classification schemata particularly in the field of sales management. Hunt (1975) states:

> Classification schemata play fundamental roles in the development of a discipline since they are the primary means for organizing phenomena into classes or groups that are amenable to systematic investigation and theory development (p. 118).

An earlier attempt was made to develop a classification system of salespeople. The present dissertation is an extension of this earlier work by

Derek Newton who identified four types of sales jobs: (1) trade selling, (2) missionary selling, (3) technical selling, and (4) new business selling (Newton, 1973). The call for a sales taxonomy has been recently echoed in at least two cites. The Marketing Science Institute (1983) in their research priorities section calls for the development of a sales taxonomy, and that the classification work begun by Derek Newton should be extended. In addition, Walker, Churchill and Ford in a 1979 publication called for the expansion and the refinement of Newton's typology. Walker, Churchill, and Ford continued by stating: "What is needed is a taxonomy of specific selling activities involved in different types of sales jobs" (Walker, Churchill, and Ford, 1979, p. 56). The purpose of this dissertation, therefore, is to develop a taxonomy of sales activities and to further determine which salespeople engage in the differing groups of activities. It is anticipated that such a taxonomy will be useful in conducting future salesforce research. This taxonomy is a beginning step in the fulfillment of an important theoretical requirement in the development of sales management knowledge.

The methodology utilized in this dissertation is designed to create a comprehensive list of specific activities from a series of focus groups and personal interviews of salespeople representing a diversity of industries. Once the comprehensive list of activities is devised, salespeople are sampled from a variety of industries. These salespeople rate the frequency and time with which they perform each activity. Through factor analysis, a taxonomy is developed in order to classify and identify groupings of related activities. A cluster analysis then differentiates salespeople based on their sales activities.

These research findings should benefit academicians conducting empirical research on salespeople without the benefit of a classification schemata of sales activities. Former researchers have conducted studies without controlling for the effects that different sales job types (Zdep and Weaver, 1967; Harrell, 1960; and Miner, 1962). Some former researchers have sought to control any effects that different types of sales jobs may have on their criterion variables by conducting single firm-industry studies. Fewer studies have been conducted using multi-firm, single-industry samples. Still fewer multi-firm, multi-industry studies exist. Though it is plausible that different types of salespersons exist, this has not been empirically demonstrated. Consequently, without a proper classification schema, former empirical studies have not adequately controlled for different types of sales jobs within their samples. Therefore, if there are different "types" of sales jobs, it is probable that different types of salespeople respond differently to organizational climate and other variables, which influence sales performance, motivation, satisfaction, and other criterion variables. By not controlling for the variability of responses of different types of salespersons to variables selected for study in previous research, it is likely that these former studies have produced artifactual findings. This may account for the lack of consistent results across different research studies.

Even though questions were being asked as early as 1961 (McMurry) about differences in sales activities, no research to date has attempted to empirically identify these differences. It is the purpose of the present dissertation research to establish a basic sales activities schemata and thus be beneficial to researchers conducting research on salespeople. A classification system of phenomena should be a basic prerequisite of epistemology.

CLASSIFICATION

Simon (1969) states that classification is the process of sorting out a collection of people or objects and of developing a set of categories among which one can divide the collection. Simon further states that classification research is found in all social sciences, from sociology to political science to economics. Simon continues by voicing four basic purposes of a classification scheme:

1. A classification enables one to deal routinely with individual cases. Because of some stated criterion that comprises a classification, any individual case should easily be placed into some given category. For example, when a marketer examines a bar of soap, one criterion is that soap has a high replacement rate. Therefore, a predetermined criterion classifies soap as a convenience good. Classification has allowed the marketer to routinely categorize. A classification schemata in sales management would allow one to associate certain sales activities with certain sales jobs.
2. A classification aids summarization. Unless the description of an area of interest is placed into categories or groups, it becomes very difficult to summarize and differentiate among different activities. Industrial goods have a number of categories for classification, including: 1) materials and parts, 2) capital items and 3) supplies and services. Kotler (1983) defines "materials and parts" as including "raw materials" and manufactured materials and parts". Capital items include "installations and accessory equipment". The

industrial classification system allows the summarization of the category into its given activities.

3. A classification makes other scientists aware of differences among the categories. The class system communicates to scientists how the phenomena differ according to the classification criteria. In other words, it is not expected that consumers will travel a great distance for a product such as chewing gum, because it is a convenience product. On the other hand, we would expect consumers to travel for a good, such as kitchen appliances, because people are shopping and comparing price and quality.
4. The classification may contain within itself the explanation of phenomena. If the category description says that a person suffering from obesity, "usually leads a sedentary existence," then within the description of the category a reason is stated as to why the person is fat, and thus an explanation. In marketing, a specialty good can be defined as "those goods that buyers are habitually willing to make a special purchasing effort." (Hunt 1976, p. 127). The description of the term is an explanation as to why a store marketing specialty goods can build at almost any location.

BACKGROUND

As a discipline, sales management has grown, evolved and matured, particularly during the past decade. As marketing management concepts and techniques evolved, so did the areas of sales management, and indeed the entire field of selling, took on an added dimension.

The importance of sales management is derived from the increased cost of operating the personal selling activity and from the importance of the selling activity in producing the firm's revenues and profits. The cost of calling on clients and prospective clients is becoming increasingly more expensive. Industrial Marketing Management (1982) has reported that the average cost for a salesperson to call on a potential industrial customer is $143; which was 43 percent greater than the average cost three years prior.

Another reason for the increased importance of sales management is based on the fact firms in the United State spend from 1.6 to 3 times more dollars annually on personal selling than they do for advertising (Lambert and Kniffen, 1970). Thus, the importance of sales management cannot be disputed. However, when one examines the magnitude of the empirical and theoretical literature of advertising as compared to that of sales management, the sales management literature is dwarfed by that of advertising. Albaum and Churchill (1979) have stated that there has been very little published theory and empirical research concerning the variables that influence the effectiveness of personal selling activities. They continue by stating that from the 1920's to the 1970's marketing academicians seemed to consider sales management as a "second class activity." As a consequence of the unsophisticated or lack of research, sales managers had to rely on "folklore passed among themselves, intuition, tradition and personal experience in managing their salesforce" (Albaum and Churchill, 1979 p. 11).

Even though the field has started to change and progress, the salesforce in the 70's has still been managed from an assortment of principles inherited from predecessors, from traditions, or from the sales managers own particular intuition. The unfortunate fact is that these managers have received

very little information or guidance from marketing academicians. Examinations of sales management texts show that very little change has occurred in the past 50 years (Walker, Churchill, Ford, 1977). The situation, fortunately, may be improving. A wave of empirical and theoretical research has begun since the early 1970's.

The following is a brief history of the evolution of sales management thought. It is important that the evolution of sales management be presented at this point in order to observe the progressive stages of sales management and to possibly understand why a classification system of sales job activities has not previously been constructed.

HISTORY

Sales managers made their appearance in the early 1900's when the "old" type of salesman who worked strictly for himself and thus had no need for sales management, gave way to a "new" type, who accepted aid from the house for which he worked. It was during this period that a growing need for supervision came into existence (Bartels, 1976).

Hoyt in 1913 describes sales managers as the link between the salesmen and the house employing them. In general, Hoyt's viewpoint directly paralleled the beliefs of scientific management as depicted and set forth by Fredrick W. Taylor. (Bartels, 1976).

By the late 1930's, sales management had reached a level that allowed the integration of concepts into textbooks that previously were regarded as just basic statements and/or unrecorded beliefs. Sales managers in this period realized for the first time the importance of facts rather than relying

on hunches. A professionalism of sales management began in the early 1950's, as was evident in the appointment of psychologists, accountants, statisticians, and marketers to positions of sales managers. For the first time, people were being appointed to sales manager positions who had not been active primarily in selling (Bartels, 1976). This change in the trend of hiring led to an influx of new ideas and concepts and the reduction of some old "selling myths." The bulk of the sales management literature in the 50's dealt with these new concepts that were being introduced, although traditional approaches were still continuing to occupy the literature.

The 1960's brought very little additional insights into the sales management literature. Bartels (1976) states, "Writings on sales management were generally confined to that management function, although its inseparability from the total marketing task was not forgotten." Discovery and research did begin in the 1960's as it did in marketing in general but most marketing empiricism and theory were being done in fields other than sales management. One primary reason for the lack of concentration in the sales management report can be explained, in part, by the emergence of the Gordon and Howell, and Pearson reports. The basic contention of the reports was that marketing is too trade (selling and retailing) oriented. The new emphasis was in the quantitative and consumer behavior fields. These "new" areas were "borrowed" directly from psychology and other social sciences.

The 1970's brought a change in thinking about sales management. Sales management began to be thought of as a science and began to include an increase in the use of scientific approaches, such as the use of experimental manipulation, measurement precision, and an increased emphasis on validation and reliability. Churchill, Ford and Walker (1974) created

INDSCALE, a validated scale developed specifically for measuring industrial salesperson's job satisfaction. The three authors also constructed a model consisting of various components thought to be important in determining salespersons' performance. A great deal of empirical research has been conducted on various dimensions of sales management such as personality factors associated with sales performance (Pruden and Peterson, 1971, Lamont and Lundstrom, 1977); role perceptions (Donnelly and Ivancevich, 1975, Bush and Busch, 1979; Walker, Churchill and Ford, 1975); job satisfaction (Futrell, 1980; Churchill, Ford and Walker, 1976); and motivational incentives (Darmon, 1974; Grant, 1979; Futrell and Jenkins, 1978; Bagozzi, 1980; Prudin, Cunningham and English, 1972). Conceptual models are being proposed and empirically tested with vigorous methodologies. Thus, sales management has begun to show the earmarks of a body of scientific knowledge. However, there is still one important step that has either been ignored or not attempted, and that is a classification system.

The classification schema is a fundamental step in the development of a discipline, since classes or groups are amenable to systematic investigation and theory development (Hunt, 1976). Science, since its inception, has been in search of what is thought of as "being the identical, the general, and recurrent aspects of the phenomena with which it is concerned:" (McKinney, 1966). Thus, science is seeking classification schema in order to identify common phenomena and in turn lead to more investigation and theory development.

Furthermore, science in all fields is considered to be both intelligible and explicable. It is intelligible in that uniformities may be stated, while it is explicable in that these uniformities stand the test of further examination.

Uniformities involve the capturing of similar experience, which is then followed by the "creation of order" out of a vast diversity of experiences (McKinney, 1966).

Scholars in sales management, and in marketing in general, have for too long put the empirical cart before the theoretical horse. The empirical research in sales management to date has occurred without this gathering of uniformities. There has been little "creation of order" and as such a foundation for further empirical research has not been established. As this brief history of sales management has shown, sales management has progressed in an orderly fashion. However, the sales management discipline has only recently become heavily involved in empirical and theoretical development. As such, a classification system should be one of the first steps in conducting empirical research and it is the goal of this dissertation research to construct a classification schemata, if such a classification exists, of sales job activities.

ORGANIZATION OF THE STUDY

This first chapter includes a statement of the purpose of this study and how the study may aid the field of sales management to progress in a scientific manner. The background section depicts a brief evolution of the field of sales management from its recognition as a discipline to the present. The chapter then concludes with this organizational overview.

The second chapter will provide the reader with a review of the taxonomical literature reviewing both the study of taxonomies in the "hard" sciences and the "behavioral sciences." The review will also include a review

of present and past work done in marketing concerning the development of a taxonomy in sales management on job activities.

Chapter three will be devoted to the methodology and how the study is to be conducted. The methodology will be divided into five major sections. The first section will discuss the generation of a list of sales activities. Section two will be a discussion of the sample design. The third section will examine the development of the research questionnaire while section four will discuss the procedures to be followed. Last, section five will be concerned with the method of data analysis of the data.

Chapter four will present the results of the analyses and discuss the relationships discovered. These results will include factor analysis. Also included in chapter four will be the results of clustering salespeople based on the factor scores. Finally, analysis of variance with a Duncan's Post Hoc test will be used to determine the relative importance of activities in classifying salespeople.

The fifth and last chapter will be a summarization of the study, results and present conclusions and recommendations for future study.

CHAPTER TWO

A REVIEW OF THE RESEARCH LITERATURE

This chapter presents a discussion of the taxonomy literature in both the hard science and social science taxonomy literature. The chapter ends with a review of the previous research on the construction of a sales activity taxonomy.

INTRODUCTION TO TAXONOMY

Man has always had a need to have a meaningful order of the phenomena that surround him. It would seem that humanity is, by nature, a species of classifying animal who looks for similarities and differences in its environment (Mezzich, 1980). Classification has always been considered to be of central importance in science because classification serves two primary functions. The first function consists of the description of objects of interest. Science (including the social sciences) is continually in search of "what is conceived as being the identical, the general, and recurrent aspects of the phenomena with which it is concerned" (Simpson, 1961). Thus, phenomena exhibiting similarities must be placed in groups based on the underlying similarities.

The second function of a classification system is the attempt to model reality. Since academia does not fully grasp how to predict reality, it

becomes the function of a taxonomy to construct a theoretical basis, which in turn may lead us to an understanding of reality. From the taxonomy then, one can examine the domain of how the theory is structured (Mezzich, 1980). The grasping of phenomena and the theoretical basis upon which the grouping is based leads to the structuring of a taxonomy. Thus, taxonomy is the science of classification.

Classification and taxonomy were first developed in and hence are associated with the physical sciences such as biology and chemistry. For example, classification became an intricate part of the biology discipline by identifying and grouping flora and fauna. It is true that the sciences were the first to classify, but now one can find taxonomy pervasive in practically every field of study including the social sciences such as psychology and sociology (Mezzich, 1980).

Though classification schema may be found in both the physical sciences and the social sciences, their classification methodologies differ. The physical sciences are a more exact science. It is much easier to compare similarities of physical phenomena since their similarities are based on stable physical characteristics that may be objectively observed and measured. However, there are problems even with a physical science taxonomy. One problem that has arisen is the evolution of plant and animal life. In certain situations, a species may be new or cross-bred and thus not capable of automatic classification. It is for this reason that some argue that mathematics is the best example of a taxonomy. If a classification system in mathematics exists, then the equations can be solved regardless of variations (Emden, 1971).

On the other hand, the behavioralist is not dealing with precise numbers or physical characteristics. The behavioral scientist is continually trying to combine two ideals; vision and precision. Precision must be incorporated in order to have accurate and scientific measurement, a feat that can prove difficult because one is measuring behavior and not physical characteristics. The behavioralist must also possess a keen vision, even more so than the physical scientist. Vision may be described as the scientist's ability to delineate the differences and/or the similarities the phenomena possess, especially when the differences and similarities are not visibly detectable in the characteristics of the phenomena in question. Vision is also a necessity to behavioralists due to the complexity, multiplicity and instability of behavioral phenomena. The behavioralist does not have the well-defined delineation from which to begin a classification system, and as such, vision and even imagination are essential for the behavioral scientist to be able to create a classification system (Simpson, 1961).

Not everyone will agree with the construction of a classification or its place in the totality of marketing research methodology. However, Lazarsfield in the forward of McKinney, 1966, argues for the use of classification by stating:

> With a classification system. . .a map can be established in which to work from--and after all that is the main purpose of any methodological effort; to give us a frame of reference within which we can perform our productive efforts with ever increasing clarity (McKinney, 1966; p. xii).

In conclusion, it has been stated that "scientists do tolerate uncertainty and frustration because they must. The one thing that they do not and must not tolerate is disorder" (Simpson, 1961). In taxonomy as in other sciences, the ordering of nature is the ultimate goal in the ordering of science.

Taxonomy is a science that is entirely devoted to the ordering of complex data, and because of this, taxonomy should be a fundamental component in any growing discipline.

HISTORY OF TAXONOMY

The procedural use of taxonomies has a very long history of use in both social sciences and physical sciences. The development of taxonomies has played an unmistakable role in the growth of science even though scholars have misused, misinterpreted and, on occasion, not recognized its use. There has also been a great deal of historical and social scientific work which has not been carried out in the most productive manner, in part due to the lack of a foundation based on a taxonomic schemata (McKinney, 1966). Nonetheless, taxonomy has been a major ingredient in the development of science in most disciplines.

There is evidence of a primitive classification system since the beginnings of mankind. The Egyptian physician Imhotep described physical and behavioral disorder as far back as 3000 B.C. The classification of mental disorder by Hypocrates, (460-377 B.C.) included epilepsy and was derived from natural rather than supernatural forces. Hypocrates classified them based on variables such as chronicity and presence or absence of fever (Mezzich, 1980).

Though taxonomy has an early and long history, the review which follows will concentrate primarily on modern taxonomy which begins in the middle of the eighteenth century. By this time, taxonomy as a distinct branch of science had already emerged. Probably the most famous name in taxonomy

history is that of a Swedish naturalist named Linnaeus, whose contributions were so influential that he has been called the "Father of Taxonomy." Linnaeus began a binominal system of nomenclature and applied the concepts to animals, which later became the foundations of zoology (Mayr, 1953). Linnaeus emphasized the idea of a systematic and complete examination of the subject in question in search for stable order and patterns.

> All the real knowledge which we possess depends on methods by which we distinguish the similar from the dissimilar. . .We ought therefore, by attentive and diligent observation, to determine the limits of the genera, since they cannot be determined a priori. . .If the genera be confused, all would be confusion (Mezzich, 1980).

Evolutionary thought had already obtained some following in the eighteenth century but it reached fundamental proportions in the middle of the nineteenth century. The middle of the nineteenth century began a period in taxonomy history known as the period of exploration, and was characterized by an intense interest in the faunas of distant lands, and in the splendor of voyages and expeditions, but more importantly for the worldwide accumulation of specimens (Mayr, 1953). The contributions made by the age of exploration and in particular those contributions of Charles Darwin were of vital importance to the physical sciences. The Theory of Evolution was important to classificationists because it produced groups recognizable in terms of similarities and differences. Darwin would suggest many paths that future taxonomists would follow including the social sciences.

The statistical stage in classification began in the eighteenth century but blossomed in the late nineteenth century, with the selection and use of manifest variables. Typically, a one-dimensional index that included all

pertinent variables was used such that the experimenter would assign groups based on respondents' replys. The modern discipline of statistics began during this period. Francis Galton (a cousin of Darwin) became known as the "Father of Regression" because of his work in the field in the late 1800's. Galton also developed the notion of correlation which serves as the basis of summarization in multivariate analysis and consequently in the study of groupings. Galton was also the first to use unweighted summation which is the basis for factor analysis. Thus, the intermingling of classification and factor analysis began around 1900. The Q Factor analysis began to be used in classification in psychology in 1935 by Sleptreman who proposed the use of Q-correlation coefficients computed between individuals across variables (Mayr, 1953).

Taxonomy and classification have been in existence for many centuries but began as a part of science only in the 1700's. The physical sciences, and particularly biology, developed many of the steps that the social sciences now follow, but classification spread quickly into psychology and sociology and other social sciences. Marketing has several classification systems for such phenomena as goods (convenience, shopping, speciality), stores (department, limited line and so forth), wholesalers (general merchandise, general line, and so forth) (Hunt, 1976, p. 119-126), but in many areas of marketing and sales management in particular, classification systems have been lacking. One may observe the history of taxonomy and other disciplines' use of taxonomy in determining how important classification development becomes for a discipline. The following section will examine other disciplines' use of a classification system and note the absence of an equivalent system in sales management.

EXAMINATION OF OTHER DISCIPLINES

Classification is a daily activity. Everywhere one looks classification has occurred, encompassing every discipline. "Classification is a daily and universal logical process" (Piper, 1929). Some of the variety of disciplines and authors that have detailed discussions of classification include: Accounting (National Association of Accounting, 1959); Anthropology (Durkheim 1963, Washburn 1963); Biology (Webster and Jones 1980, Cox 1966, Baker 1970, and Heywood 1973); Botony (Groover 1969, Mattox and Bold 1962, Porter 1967, Lutz 1968, Lawrence 1951); Chemistry (Leone 1964), Computer Science (Demirnen 1969); Education (Bloom 1956); Geology (Afshar 1969); Mathematics (Emden 1971, Jardin and Sibson 1971, Cole 1969); Psychology (Sells 1968, Stott 1975, Harrow 1972) and Zoology (Eddy 1961, Spratt 1975, Beveridge 1976, Roth 1977, Fooden 1969).

The following discussion briefly examines some differences in the physical and social sciences.

Physical Sciences

The physical sciences base their entire existence upon their taxonomic systems. Chemistry has a classification system based on the elements, biology has its fauna and flora, entomology its insects, and zoology has its animals. The common ingredient in these sciences and other physical sciences is that each science revolves around a classification system. If one

were to examine biology, one would find, as a basic feature, a sequence of seven hierarchical levels:

Kingdom

Phylum

Class

Order

Family

Genus

Species

By adding the use of all possible super-, sub- and infra-levels between kingdom and subspecies a grand total of 24 levels is possible (Gregg, 1954). A classification system based on biology's hierarchical taxonomy would be virtually impossible in marketing as well as other social sciences. The reason for this impossibility brings up the major difference between social sciences and physical sciences. The social sciences, in general, use statistical or probability laws and explanations since our knowledge is imperfect in the sense that we cannot know all the variables which influence the phenomenon to be explained. In this respect, the social sciences are more complex, thus their classification systems will differ somewhat from the physical sciences. Therefore, the remainder of this section will examine the social sciences and, in turn, review taxonomy in marketing sales management.

Social Sciences

McKinney (1966), a sociologist, in giving his reason for classification states, "The constructed type serves as a point of reference for the analysis

of the social order in that it serves as a basis for comparison and potential measurement of concrete occurrences." McKinney has stated that the comparison of the construct with the empirical data should serve as a basis for further hypothesizing, which leads to a general level of rigorous methodology. The previous point has not escaped marketers. Engel, Kollat and Blackwell (1973) stated about consumer behavior, "The lack of standardized variable categories also make it difficult to compare and integrate research findings. Instead of improving, this problem has also intensified during the last five years."

This lack of standardization that Engel, Kollat, and Blackwell speak of can perhaps be explained by the lack of a classification system in consumer behavior. There is no "point of reference" for analysis that McKinney referred to previously. Consumer behaviorists are hypothesizing and conducting empirical research, but there still does not exist a base of standardization to compare and integrate results. The aspect missing is a system of classification.

A similar example of the lack of a standardization base can be discovered in sales management. An example can be shown in which forcefulness (dominance, ego drive, need for achievement, aggressiveness) was compared to performance in numerous studies with varying results. Harrell (1960) sampled an oil company, Merenda and Clark (1959) sampled a life insurance company as did Greenberg and Mayer (1964), and finally Howells (1968) surveyed an automobile salesforce. All three studies found statistically significant levels between forcefulness and job performance. However, another series of studies found the opposite results in that there was no significance between forcefulness and job performance. Miner (1962)

used as his sample an oil company, while Zdep and Weaver (1967) surveyed a life insurance company and Howells (1968) sampled technical representatives and members of a retail salesforce. These three studies have results totally inconsistent with aforementioned studies, in that they found no statistical significance between forcefulness and job performance (see Table 1). One explanation for these differences may be that sales performance may have been defined and measured in a variety of different ways. However, Churchill, Ford, and Walker (1981) reject this measurement explanation and state that this cannot explain all the inconsistencies. Some of the personal characteristics, (i.e., age and job experience) were measured objectively and consistently in several studies, and yet results differ. Churchill states, "Another plausible explanation for the lack of consistent relationships is the different types of sales jobs require salespeople to perform different activities and to deal with different types of customers." In other words, different types of sales jobs may exist and the different salespersons may vary widely according to the salespersons activities on their sales job. Thus, it becomes important to examine sales jobs according to sales activities and to classify jobs according to these activities.

TABLE 1

"AN ILLUSTRATION OF INCONSISTENT FINDINGS

BASED ON THE VARIABLE FORCEFULLNESS"

FORCEFULNESS	Studies in which characteristic was related to performance at a statistically significant level.		Studies in which characteristic was not related to performance at a statistically significant level.	
	SAMPLE COMPOSITION	AUTHOR/S	SAMPLE COMPOSITION	AUTHOR/S
	Oil Company	(Harrell, 1966)	Oil Company	(Miner, 1962).
	Life Insurance	(Meranda and Clark, 1959)	Life Insurance	(Zdep and Weaver, 1967)
		(Greenberg and Mayer, 1964)	Technical Reps	(Howell, 1968)
	Van Sales	(Howells, 1968)	Retail Sales	(Howell, 1968)

Adopted From Churchill, Ford and Walker, (1979, pp. 280-281).

STEPS IN A TAXONOMY

There is no one standardized procedure or methodology used by all taxonomists to develop a classification schemata. However, McKinney (1966) has provided a series of operational or procedural steps based on past works to help explain the utility and the limitations of constructive typology. Even though the studies were based on sociology, McKinney states that the steps are applicable in the social sciences generally. The steps are as follows:

1. Delineation of the problem situation. The first step in the development of a taxonomy is the recognition that a problem exists in the field of study. One should examine and explain the theoretical and empirical issues concerned with the problem situation. In other words, the development of a taxonomy in the given problem area should become an important and fundamental part in the scientific development and advancement of the discipline.
2. Familiarization with relevant available data. As is true in any empirical or theoretical research, the researcher must begin with a thorough and exhaustive search of the literature.
3. Derivation of hypothesis about relationships and sequences. In order to arrive at a tentative analysis, it is necessary to turn to an abstract level of analysis while at the same time keeping in mind the specifics of the particular situation with which one is concerned.
4. Delineation of empirical uniformities and pragmatic reduction to type. This step attempts to define attributes of the class. One must choose those attributes that stand out as being most obvious or

the most crucial with respect to the relationship between class and the system. In the present dissertation research this would mean the gathering and selection of sales job activities to be used in classification.

5. Simplifications of type with regard to attribute sphere from which it is drawn. This step is concerned with the purifying of attributes chosen in the previous step. On the basis of general knowledge of the relevant data, or by other means such as professional or expert opinions, all attributes (sales activities in this case) must be reviewed and examined.

6. Adaptation of available theories and principles to give a tentative explanatory accounting of the type. The sixth step involves looking at current literature and theories and combining these theories with the type or classes that have been developed. Once the classes have formed, further hypothesis can be derived based on the classes to potentially explain the behavior in question. The further study or hypothesizing leads to the creation of a taxonomy. Simpson (1961) defines taxonomy as "The theoretical study of classification, including its bases, principles, procedures, and rules." The subject of this classification is sales activities, the subject of the taxonomy is the classification structure. In summary, the sixth step then becomes the creation of new hypotheses based on the current classification system which becomes the beginning of the taxonomy.

7. Empirical verification of the type. This last step is the conducting of empirical studies to build and create the taxonomy.

Industrial psychology provides perhaps the closest example of how to build a taxonomy around job activities. McCormick in the Handbook of Industrial and Organizational Psychology describes how the U.S. Air Force has developed a classification based upon job activities. One of the earliest steps of building a classification system is the specification of job activities. McCormick recommends examining several different aspects in the collection of these various activities. First, examine the work activities expressed in job terms indicating what is accomplished, or perhaps why or how an activity is performed. Also included in this category of activities are worker-oriented activities such as human behavior, motions and personal job demands. A second category is to examine machines, tools, equipment and work aids used. This particular category is not quite as appropriate in the topic of this research. However, the third category of job related tangibles is somewhat more useful. Tangibles and intangibles include materials, the product, services rendered and knowledge dealt with. The fourth category is work performance including work measurement and standards. The fifth category is job context including physical working conditions, work schedule, organizational context, social context and incentives. Finally, one should examine personal requirements such as job-related knowledge skills, experience and aptitude.

A second major contribution of the McCormick study is an example of how to actually collect information on the activities when one reaches the questionnaire stage. The questionnaire format of McCormick lists the activities, whether the activity is performed by respondent, and two seven-point Likert scales concerning time spent and frequency. McCormick also

discusses reliability and analysis procedures which will be referred to later in this dissertation.

MARKETING BACKGROUND ON DEVELOPING A CLASSIFICATION OF SALES JOB ACTIVITIES

McMurray (1961) stated that individual salespeople do not have the same problems and needs that some of their peers have. Just because a person sells does not mean they perform in the same manner. Salesmen cannot be just "black and white." As such, McMurray theorized that there were basically seven types of salespeople. The first "type" concerns the salesperson's job as predominantly one who delivers the product. An example of this "type" would be a milkman or bread salesman, whose selling responsibilities are secondary to service.

The second major classification of salespersons according to McMurray is one who is predominantly an inside order taker. The salesperson standing behind a counter selling clothing would be an example of the inside order taker. The primary responsibility is service to the customer with a minimum of selling.

The next "type" of salesperson is one who is an order-taker but who also works the field. Someone who sells spices to retail stores would be categorized in this class. This salesperson has contacts with store personnel but does very little creative selling.

The fourth "type" has traditionally been called a missionary salesperson. This is the person who does not take an order but rather builds good will or educates the potential user, such as a distiller who sends their representative

to talk to bar owners about their product. If the bar owner buys the product it is not from the sales representative but rather from a wholesaler.

Fifth, is the salesperson who places emphasis on technical knowledge, such as a computer salesperson. The technical salesperson must have a special knowledge about the product because of its complexity.

The sixth salesperson attempts to create a demand of a tangible product (vacuum cleaners). This salesperson has a double task in that a dissatisfaction must be created for the consumer's existing product while attempting to sell the salesperson's product.

Last is the salesperson who, through creativity, must sell an intangible product such as insurance.

The problem with McMurray's classification system is that no empirical research was conducted to design the classification nor to later test the different "classes." However, in 1973, Newton, using a modified classification system based on the 1962 McMurray system, gathered data and attempted to examine differences among salespeople. Newton felt that there is not a "proper" practice which can be applied in all salesforce situations. Newton's study was attempting to study two broad areas; management practices, and performance and turnover. Through a mail survey Newton queried 4,922 salespeople. Based on the response of 1,029 salespeople, Newton grouped the firms based on the "type" of selling task assigned to each salesforce. Newton narrowed the classification system to four types of salespeople.

1. Trade Sellers - Salesforces whose primary responsibility is to increase business from present customers by providing them with

promotional assistance--the soap salesman who sells to chain store personnel.

2. Missionary Seller - Salesforces whose primary responsibility is to increase business from present customers by providing them with personal selling assistance--medical distiller who calls on doctors as a representative of an ethical pharmaceutical house.
3. New Business Sellers - Salesforces whose primary responsibility is to obtain business from new customers. This kind of selling activity is variously called "bird-dogging," "canvassing," or "cold-calling," -- door-to-door storm window salesmen.
4. Technical Sellers - Salesforces whose primary responsibility is to increase business from present customers by providing them with technical assistance--the industrial products salesman who sells to purchasing agents.

The survey population in Newton's study was comprised of companies employing at least 10 salesmen, and excluded salesforces who were primarily retail or whose business was service-oriented (insurance-banking). Newton's findings regarding performance were that there are differences in the salesforces depending upon their classification. However, his findings regarding turnover levels and the cost of operation were very similar across the divisions of his classification scheme. The problem with Newton's classification system was that subjects were subjectively placed into categories. Newton asigned every salesperson into 1 of 4 categories and then examined differences. Judgment and intuition were the basis of his classification.

The third study in the history of selling taxonomies was conducted by Churchill, Ford and Walker (1978). The authors were conducting a motivation

study in which an attempt was made to identify sales activities. Respondents reported most frequently engaging in the following activities: "calling on prospective new customers, attempting to increase the motivation of resellers, planning and organizing selling activities and filling out reports." Churchill, et. al., report that some problems occurred with the list of activities. The primary problem was that the activities were too broadly defined. "Providing services to customers" might incorporate a large number of more specific actions and behaviors, and these might vary substantially across different companies." Furthermore, "respondents from differing firms listed different activities as being common and important parts of their selling job." This then, is a further suggestion that different selling activities may be involved with different selling jobs. "What is needed is a taxonomy of specific selling activities involved in different types of sales jobs" (Walker, Churchill and Ford, 1979, p. 39).

Lamont and Lundstrom (1974) conducted a study to attempt to identify some basic dimensions of the salesperson's behavior. The authors, through extensive personal interviews, examined the duties, descriptions and responsibilities of the various salespeoples' jobs. From these interviews, 60 items describing the aspects of sales jobs were selected and pretested. The items were scaled using a Likert format with importance replacing awareness as anchor points. A mail survey was employed using a building materials firm with 137 usable responses. Lamont and Lundstrom used factor analysis to reduce the 60 variables to eight factors. The eight factors consisted of the following:

1. Assisting and Working With Direct Management
2. Customer Service

3. Personal Integrity and Selling Ethics
4. Direct Selling
5. Developing Relationships With Customers
6. Keeping Abreast of Market Conditions
7. Meeting Sales Objectives
8. Maintaining Complete Customer Records

These factors were further reduced by second, or higher order factor analysis. Lamont and Lundstrom state that second order analysis is useful in order to "tie together basic empirical dimensions or concepts into a broader theoretical description of a domain." The second order analysis narrowed the eight factors to three. The three factors were based on behavioral dimensions including, (1) technical, (2) administrative, and (3) human relations skills. Lamont and Lundstrom's final three dimensions differed somewhat from Rados' (1946) final three dimensions. Rados hypothesized the three major areas as (1) direct selling, (2) customer service, and (3) communication and organizational relationships. Crissy and Cash (1956) suggested a different three dimensional concept including: (1) planning, (2) selling, and (3) self-supervision.

A classification of salespeople has been recognized as being important in the marketing literature. However, only Lamont and Lundstrom have conducted empirical research to determine the classifications. One possible problem with Lamont's and Lundstrom's list of activities is that it is not complete enough. Also, their study was conducted on only one building firm, thus not examining a variety of industries and casting some doubt on the

generalizability of their classification system. However, Lamont and Lundstrom's research is a valuable first step in developing a list of comprehensive sales activities, and developing a classification scheme.

In summary, taxonomies have been a fundamental progressive step in the development of all disciplines. Taxonomies were originally associated with the physical sciences but now encompass virtually all disciplines. The first classification system in sales management appeared in 1961 by McMurray, followed in 1973 by Newton who modified the McMurray study. Since 1973, Lamont and Lundstrum (1974) and Churchill, Ford and Walker (1978) have both performed research designed to collect sales activities. This dissertation research builds on these four studies.

CHAPTER THREE

RESEARCH METHODOLOGY

The basic purpose of this chapter is to present the methodology that was involved in the creation of a classification schema of sales job activities and the development of a sales taxonomy. This chapter will be divided into six major sections including the following:

1. Overview of the Taxonomy Procedure
2. Generation of Sales Activities
3. Sample Design
4. Questionnaire
5. Procedure
6. Analysis

OVERVIEW OF THE TAXONOMY PROCEDURE

This first section of Chapter 3 is a brief presentation of the steps necessary in the construction of the sales taxonomy. Table 2 provides a listing of all major procedures.

The first step became the specification and generation of sales activities. The specification was obtained through the use of focus groups and personal interviews. A sample of 1393 salespeople then rated the activities on the basis of "frequency" and "time".

The first analytical step was incorporated in order to group related activities. A factor analysis was conducted on the frequency scale and then separately on the time scale. From this point forward, all analytical runs were conducted twice; once for "frequency" and once for "time".

After activities had been grouped, the salespeople were grouped based on their factor scores. This procedure was conducted through a cluster analysis technique known as "Fastclus".

At this point there were two "groups"; factors and clusters. Some form of merger was needed, such that a statement could be made as to which clusters of salespeople perform which factored activity groups. Analysis of variance was used as the statistical technique to determine the factors that each cluster performed. It could now be stated that cluster 1, for example, significantly more frequently performs factors 1, 9, and 10 and rarely performs activities 6, 8 and 12.

The last step was the identification of salespeople in each Cluster. A crosstab of clusters versus demographics (including company and SIC group) provided this identification.

TABLE 2

"OVERVIEW OF THE SALES TAXONOMY"

METHOD OF ATTAINMENT	OBJECTIVE
SEARCH OF THE LITERATURE; FOCUS GROUPS AND PERSONAL INTERVIEWS	(1) SPECIFICATION OF INDIVIDUAL SALES ACTIVITIES
QUESTIONNAIRE	(2) RATING OF EACH ACTIVITY ON: (A) FREQUENCY (B) TIME
FACTOR ANALYSIS	(3) GROUP RELATED ACTIVITIES: (A) FREQUENCY (B) TIME
CLUSTER ANALYSIS OF FACTOR SCORES	(4) FORMATION OF SALESPEOPLE INTO SIMILAR GROUPS: (A) FREQUENCY (B) TIME
STEPWISE DISCRIMINANT ANALYSIS ANALYSIS OF VARIANCE DUNCAN'S MULTIPLE RANGE TEST	(5) MERGER OF SALESPEOPLE GROUPS WITH GROUP ACTIVITIES: (A) FREQUENCY (B) TIME
CROSSTAB CLUSTER VS. DEMOGRAPHICS	(6) IDENTIFICATION OF SALESPEOPLE GROUPS: (A) FREQUENCY (B) TIME

GENERATION OF ACTIVITIES

A crucial first step in the development of the classification schemata was to operationally define the domain of the construct and also to develop a list of sales job activities that is representative of all activities in the defined domain. The domain of the activities included all industrial salespeople who sell a tangible product, thus excluding service organizations. An industrial salesperson, as defined by Churchill, Ford, and Walker (1979), involves three types of customers:

(1) Sells to Resellers - This salesperson sells their product to some form of middleman, such as a wholesaler or retailer, who in turn resells the product.

(2) Sells To Business Users - This category contains those who buy the company's product to be used in the production of another product. Industrial machinery would be an example for this category.

(3) Sells To Institutions - The third category are those that sell a product to an institution such as businesses or hospitals. Examples of this category would include copiers, computers and office supplies.

This domain intentionally excluded salespeople who sell insurance or other services and who are considered members of the retail salesforce.

Because of the vastness of sales, some form of parameter was needed for the study. The Standard Industrial Classification code provided the best of parameters. Services such as insurance are classified into a different division

than are manufacturers (see table 3), because services tend to perform a different set of activities.

The retail salesforce was also omitted. Even though the retailer does sell a tangible product, there are enough substantial differences between retailers and industrial salespeople that would prevent the two from being classified together. One primary difference is that the customer goes to the salesperson rather then the salesperson going to the customer. The retail salesforce is a separate field that also needs some form of taxonomy or classification.

TABLE 3

"SIC DIVISIONS"

Divison A	-	Agriculture, forestry, fishing
Division B	-	Mining
Divison C	-	Construction
Divison D	-	Manufacturing
Division E	-	Transporation, Communications, Electric, Gas, and Sanitary Services
Division F	-	Wholesale Trade
Division G	-	Retail Trade
Division H	-	Finance, Insurance, and Real Estate
Division I	-	Services
Division J	-	Public Administration
Division K	-	Nonclassifiable Establishments

A number of criteria must be met in order to have a successful system of classification. This study implements and follows four basic premises in developing a taxonomy as suggested by Piper, 1929. This section also discusses two other criteria that were important in the development and progression of the sales taxonomy.

Piper's first rule of Classification is the following:

(A) "A division should be based upon a single principle or characteristic which is applicable to the aggregate to be divided." Piper states that only one characteristic should be used in terms of classifying or a problem of cross-division occurs. The single characteristic should be the most natural and fundamental element and should be able to accomplish the researcher's reasons for constructing a taxonomy. This study is best suited by using sales "activities" as its "characteristic". One reason for the use of sales activities is that all salespeople perform activities in their sales job. Also, activities can be readily identified. In addition, Walker, Churchill, and Ford in a 1979 publication called for an exhaustive list of sales activities that could be used in the development of a sales taxonomy. Lamont and Lundstrum (1974) also identified the importance of sales activities in developing classifications. The sales activities of a salesforce is the most natural criterion in dividing and classifying.

(B) "The species into which a genus is divided should be mutually exclusive." Mutual exclusivity and thus specificity was probably the most important issue to examine. Walker, Churchill and Ford (1979) have stated that a problem in their previous research was that their

activities were too general. Walker gives an example with "providing services to customers" as an activity, and continues by saying, ". . .this activity might incorporate a large number of more specific actions and behaviors, and these might vary substantially across different companies" (Walker, Churchill, and Ford, 1979, p. 38). Thus, if the activities are too general then they will have little or no discriminating ability. Another example can be provided by the examination of two activities: "selling activites" and "non-selling activities." These two activities are too broad and general because there is no capability to discriminate among salespeople based on these two activities. Every salesperson performs "selling activities" and "non-selling activities;" thus, nothing is gained by examining the two. A further example can be presented by using "sales presentation" as an activity. Even though "sales presentations" may not be as general as "selling activities," it still probably will not discriminate between salespeople who may conduct different types of sales presentations. That is, all salespeople conduct "sales presentations". For purposes of this study, "sales presentation" is not specific enough. It does not account for items such as "preparing sales presentations," "conduct demonstrations," "prepare visual displays," and other activities that are a part of "sales presentation."

On the other hand, if the activity was too specific, there could be literally tens of thousands of activities to account for a salesperson's behavior. An example might be "filling an order" which has some degree of specificity, but if the activity became too specific, "filling an order" might become the following: "pick up pencil,"

"pick up invoice," "fill in invoice number," "fill in company name," etc. These activities are only a few of the activities that combine to become "filling an order." If thousands of activities appear on a questionnaire, quite obviously the information that is being sought will never be acquired.

Therefore, it becomes important to differentiate salespeople based on activities. As such, they cannot be allowed to become too broad. However, it is equally important to keep the activities from becoming too specific and thus a liability to the research. In summary, the acquisition of activities should be general enough to include all major functions of salespeople without overlap and yet specific enough to clearly describe the activities of the salesreps.

(C) "A division should proceed by gradual or progressive steps." Major categories should be developed first. Further research then can divide the classes into subsets, possibly followed by further subsets. This study is attempting to find that first level of division. Subsequent research may then be able to subdivide the first level.

(D) "The species into which a genus is divided should be collectively exhaustive." Piper states that basically all relevant variables or species should be included, with the exclusion of any irrelevant variables. A great deal of time and care was taken to ensure that all relevant variables were included. The list of activities utilized in this study were derived from several sources. Many activities, particularly the basic activities, were found in the existing literature. Included in this category of existing literature were past research studies and particularly marketing, sales, and sales management texts (see Table 4 for a breakdown of where the activities

were derived). However, the majority of sales activities were obtained from a second source: a series of personal interviews with salespeople representing a variety of industries. These discussions were carried out in two types of settings. The first setting was a series of open-ended personal interviews with salespeople from a variety of industries. These personal interviews, conducted solely by this author, attempted to elicit those commonly occurring activities, and equally important, the activities that were less frequent in occurrence. Probing questions were used to assure that these salespeople were accounting for all of their time in performing activities. The salesperson was typically asked to go through an "average" day from the time they got ready to go to work until the time that all work activities ceased. Each day was diagnosed for their activities and questions were asked concerning how a day might vary. The salesperson was asked to specify differences in their jobs and a variety of other salespeople's jobs. The last set of questions were arranged around a series of 60 activities taken from the literature. The salesperson was asked if they performed the activity. If not, was there a substitute for the activity, and/or a variation in the activity. These unstructured interviews lasted anywhere from forty minutes to an hour and a half.

The second setting consisted of focus groups that were utilized to secure additional activities that were forthcoming as a result of interaction and stimulation due to an environment of different salespeople. Each focus group lasted from one hour to two hours.

Questions were similar to those asked in the personal interviews. The group interaction tended to bring forth activities that the salesperson otherwise might not have mentioned. Four different focus groups were organized and conducted. The last focus group brought forth no new activities and the information was repetitive of the personal interviews and first three focus groups. At this point, the focus groups and interviews ceased and the activities list was constructed.

Piper's principles were concerned with the compilation of criteria to use in a taxonomy. After "activities" was chosen as the criterion for the taxonomy, a list of mutually exclusive and collectively exhaustive activities was gathered.

TABLE 4

"A DISCRIPTION OF THE SOURCE OF EACH ACTIVITY"

Obtained From Churchill Ford and Walker (1981)

1. Supervise Installation
2. Trouble Shoot Technical Problems*
3. Expedite Orders
4. Train Customers in Use of Product
5. Prepare Sales Presentations
6. Handle Back Charges
7. Tailor Deliveries
8. Handle Price and Credit Negotiations
9. Design Products and/or Systems For Customers
10. Call on New Accounts
11. Call on Potential Accounts
12. Entertain*
13. Study Company's Product Line
14. Call on Existing Accounts
15. Study Customers Needs
17. Attend Company Training Programs
18. Attend Company Sales Meetings
19. Attend Conferences and Conventions

Obtained From Lamont and Lundstrum (1974)

1. Assist Management in Surveys
2. Prepare Expense Reports
3. Deliver Products
4. Handle Credit Information*
5. Make Sales Presentation
6. Handle Sales Objections
7. Provide Technical Information
8. Use of Entertainment*
9. Close the Sale
10. Identify the Individual With Authority to Buy
11. Check Customer Inventory

Obtained From Sales Management Texts and Readings

1. Prepare Sales Presentations
2. Write Up Orders
3. Perform Maintenance
4. Stock Shelves
5. Forecast Demand
6. Look for New Reps
7. Attend Sales Meetings
8. Read Company Literature
9. Travel*
10. Correspondence*
11. Phone*
12. Attend Training Sessions

All other activities were obtained from personal interviews or from focus group settings.

*Relabeled after pretesting or divided into more than one category.

A priori Conceptualization Schema of Sales Activities

Two considerations became important at this point. The first consideration was that the 121 activities had to be compiled and arranged on the research instrument. The second consideration became the organization of activities into a preliminary schema.

1. Ordering - Care was taken in that the activities were worded such that the various types of sales people understood and decoded the activity in similar manner. For example, one proposed category, "sales presentation" had the following activities:
   (1) Prepare sales presentations
   (2) Design or prepare visual displays to be used in the presentation
   (3) Select which products to take on call
   (4) Make sales presentation
   (5) Conduct demonstration
   (6) Use some type of aid in presentation

The six activities have a natural order such that if the salesperson performs these activities, they are more likely to have the same meaning than if they are inverted or scattered throughout the list. This ordering should also aid the respondent in completing the lengthy list of activities in that they follow in some natural form of order.

2. Organization - Each of the activities were placed in groups of similar activities such that an ordering could occur. This organization could also be used in comparison with other organizational frameworks. In this case, the activities were organized into 24 categories or groups (see Table 5). The grouping of these activities

was formed solely on the basis of personal logic and was done partially to aid in the processing of the vast quantity of information. This grouping also served as a basis for a conceptual scheme. The groupings were designed to make checking, and reviewing of the activities a great deal easier. It also allowed some comparison to other organizational schemata, such as Lundstrum and Lamont's (1974) activities classification.

Conceptualized Activity Groupings

Each of the 121 activities was arranged into one of 24 groups based on some thread of commonality. Many of the categories were based on previous studies and writings. For example, the first group, "sales presentations," was comprised of several activities that are associated with a sales pitch or presentation. These activities were primarily found in sales texts and thus were very common and easily organized.

The second group (Supervise Equipment) was comprised of 6 activities, most of which were mentioned by Churchill, Ford and Walker (p. 6 (1981). These activities are concerned with a technical product and as such would match categories established by McMurray and Newton.

Expediting orders was comprised of eight activities that were obtained from a wide variety of sources. An order taker was one of the categories established by McMurray and became the basis of this grouping.

Training was a mixture of activities primarily obtained from interviews and focus groups, as was promotion, and price and credit.

Calls consisted of six activities that were primarily found in the existing literature and collaborated by the interviews. Designing the product was similar to a Lamont and Lundstrum category with a few activities added from interviewing.

Planning was a category that was directly mentioned by Crissy and Cash (1956), while Supervision was similar for a category mentioned by Rados (1946).

Sales meetings along with attending conferences were a combination of activities from Churchill, Ford and Walker and a category mentioned by Lamont and Lundstrum.

All the other groupings were small in number and comprised primarily from the personal interviews and focus groups conducted with salespeople.

In summary, a guideline for the development of a taxonomy was composed of four criteria:

1. A division should be based upon a single principle or characteristic which is applicable to the aggregate to be divided -- in this case, "activities" of salespeople.
2. The species into which a genus is divided should be mutually exclusive.
3. A division should proceed by gradual or progressive steps.
4. The species into which a genus is divided should be collectively exhaustive.

Two other considerations were made in the construction of the questionnaire:

1. There must be a logical ordering of characteristics.
2. There should be a preliminary organization of characteristics for purposes of comparing and contrasting to previous research and for

purposes of double checking mutual exclusivity. An A priori conceptualization scheme was proposed consisting of 24 groups from the 121 activities.

TABLE 5

"A PRIORI CONCEPTUAL SCHEMA OF SALES ACTIVITIES"

	ACTIVITY GROUPINGS	NUMBER OF ACTIVITIES IN GROUP
1.	Sales Presentations	(9)
2.	Supervise Equipment	(6)
3.	Expedite Orders	(8)
4.	Training	(6)
5.	Promotion	(5)
6.	Price & Credit	(8)
7.	Calls	(6)
8.	Design Product	(6)
9.	Socialize	(5)
10.	Planning	(4)
11.	Sales Meetings	(6)
12.	Conferences & Conventions	(4)
13.	Deliveries	(5)
14.	Travel	(6)
15.	Supervision	(3)
16.	Distributors	(2)
17.	Study	(4)
18.	Reports	(5)
19.	Work Schedule - Format	(3)
20.	Use of Mail	(4)
21.	Use of Phone	(4)
22.	Trouble-Shoot	(2)
23.	Politicking	(3)
24.	Miscellaneous	(7)
		121

SAMPLE DESIGN

The population or universe of this dissertation research consisted of all industrial salespeople who sell a tangible product to be used for resale or for the manufacture of other products, or for aid in the sale of other goods or services. The salespeople that comprised the population sell a vast diversity of products and represent numerous industries with a multitude of firms within each industry.

The sample frame consisted of companies classified by the Standard Industrial Code which is compiled by the United States Bureau of the Census. The Standard Industrial Code or SIC code (1980) was developed for use in the classification of establishments by type of activity in which they are engaged. The goal of the SIC code is to promote uniformity in the presentation of statistical data and as a method of organization of business information such as; value in manufacturing, capital expenditures, and total sales. The SIC numbers are numerical categories established by the U.S. Department of Commerce to cover all industries, manufacturing and non-manufacturing. Every corporation and type of business activity is assigned an industry SIC number. The structure of the SIC code allows tabulation and analysis on a division, a two-digit, or a four-digit industry code basis, according to the level of industrial detail considered most appropriate (Standard Industry Code, 1980). The SIC code was chosen to obtain a sample list of firms because of its thoroughness in the division of industries into groups, and the classification of all firms, by name, into an SIC group. Also, the difficult problem of determining which firm belongs in which industry has

been avoided since the SIC code has pre-classified all firms. In addition, Newton (1973) in his previous attempt at classification used SIC number to insure a diversity of firms in size and activities. Newton does not state which major two digit groupings were used, but this dissertation research used group 20 through group 39. Groups 20-39 are organized under the section in the SIC code entitled "Manufacturing" (see Table 6).

The sample frame contains all but the smallest (four salespeople or less) of companies. A company was not represented in the sample frame if it contained fewer than four full-time salespeople, depending on the given industry. Thus, the smallest of companies are not represented. However, this SIC organization is by far the best compilation of firms found to coincide with the population of research.

Another alternative was to buy a list of manufacturers, but this list did not categorize the company as to products sold. The SIC code has preclassified all manufacturers thus eliminating the potential bias of incorrectly classifying a company based on incomplete knowledge.

A pretest was deemed to be necessary at this point to determine (1) the interest of respondents, (2) to obtain an estimate of the potential response rate, and (3) to estimate the effect of the length of the questionnaire and, in fact, to determine if the study was irrelevant and esoteric to respondents. A letter of introduction and explanation was sent to fifty firms across the United States to ascertain the level of interest (see Appendix 1). Based on total sales, twenty-five firms were large Fortune 500 firms while twenty-five firms were non Fortune 500 companies. Positive response, in which respondents professed an interest in participating in the study, was received from eight firms representing a 16 percent response rate. This response rate was

deemed as being of sufficient magnitude to warrant surveying a much larger sample of business firms. Also, the eight firms were evenly divided between large and small companies.

TABLE 6

TITLES AND DESCRIPTIONS OF THE
20 TWO-DIGIT SIC INDUSTRIES"

Division D. Manufacturing*

Major Group 20.	Food and kindred products.
Major Group 21.	Tobacco manufactures.
Major Group 22.	Textile mill products.
Major Group 23.	Apparel and other finished products made from fabrics and similar materials.
Major Group 24.	Lumber and wood products, except furniture.
Major Group 25.	Furniture and fixture.
Major Group 26.	Paper and allied products.
Major Group 27.	Printing, publishing, and allied industries.
Major Group 28.	Chemicals and allied products.
Major Group 29.	Petroleum refining and related industries.
Major Group 30.	Rubber and miscellaneous plastics products.
Major Group 31.	Leather and leather products.
Major Group 32.	Stone, clay, glass, and concrete products.
Major Group 33.	Primary metal industries.
Major Group 34.	Fabricated metal products, except machinery and transportation equipment.
Major Group 35.	Machinery, except electrical.
Major Group 36.	Electrical and electronic machinery, equipment, and supplies.
Major Group 37.	Transportation equipment.
Major Group 38.	Measuring, analyzing, and controlling instruments; photographic, medical and optical goods; watches and clocks.
Major Group 39.	Miscellaneous manufacturing industries.

*Other titles of divisions would include for example, Agriculture, forestry and fishing; mining; construction, etc.

Sample

The determination of the sample size was, in effect, a two-step process the first step was the determination of the minimum number of salespeople in order to conduct the study successfully. Since factor analysis was to be the primary tool of analysis, anywhere from a 7:1 to a 10:1 (Nunnally, 1967, p. 354) ratio should be observed between observations and variables. The scales used contained 121 activities, thus a minimum sample of 847 respondents was required. The difficult step then became estimating the "average" salesforce size per company and then figuring a percentage that would actually complete a usable questionnaire. The examination of the SIC codes indicated the salesforces ranged from two people to several hundred people with the mean being about 25 to 30. The assumption was then made that the average salesforce was 30 individuals. A number or percentage of salespeople could be expected not to return the completed questionnaire. To be conservative, a 50% non-response rate was chosen, even though each participating company was instructed to strongly encourage participation by their salesforce. This would mean an average of 15 completed questionnaires per company. In order to obtain 847 people, at least 57 companies would be needed.

The second step was to calculate how many companies should be sent a letter asking for cooperation in order to obtain at least 57. Based on the pretest, it had been determined that about 15% of the corporations solicited would actually be interested in continuing. However, a large number of these companies would probably not cooperate after seeing the length of the questionnaire or not participate due to some other problem which might arise. Therefore, eight hundred letters were sent out and at a 15% return rate, 120 responses were expected.

A systematic stratified sample was used to draw the 800 firms with each of the 20 SIC groups defined as a stratum. All companies of the 20 SIC groups listed in the 50,000 Leading U.S. Companies were summed to 2702. The second step was obtaining the percentage of each strata to the total list of companies. SIC code 20, for example, equaled 199 ÷ 2702 or 7 percent of all companies listed. Each code's percentage of total companies was obtained with the following results:

SIC	20	199 ÷ 2702 =	.0736	SIC	30	78 ÷ 2702 =	.0288
SIC	21	9 ÷ 2702 =	.0033	SIC	31	28 ÷ 2702 =	.0103
SIC	22	99 ÷ 2702 =	.0366	SIC	32	93 ÷ 2702 =	.0344
SIC	23	103 ÷ 2702 =	.0381	SIC	33	128 ÷ 2702 =	.0473
SIC	24	57 ÷ 2702 =	.0210	SIC	34	199 ÷ 2702 =	.0737
SIC	25	47 ÷ 2702 =	.0173	SIC	35	347 ÷ 2702 =	.1284
SIC	26	68 ÷ 2702 =	.0251	SIC	36	420 ÷ 2702 =	.1554
SIC	27	119 ÷ 2702 =	.0440	SIC	37	124 ÷ 2702 =	.0458
SIC	28	199 ÷ 2702 =	.0737	SIC	38	178 ÷ 2702 =	.0658
SIC	29	47 ÷ 2702 =	.0173	SIC	39	160 ÷ 2702 =	.0592

The next step in obtaining the sample consisted of determining how many companies within each SIC code to include in the total sample. The step was accomplished by multiplying the 800 companies by the previously determined percentage for each SIC code stratum. Thus, the SIC code groups contained the following:

SIC	20	.0736 x 800 =	59	SIC	30	.0288 x 800 =	23
SIC	21	.0033 x 800 =	3	SIC	31	.0103 x 800 =	8
SIC	22	.0366 x 800 =	29	SIC	32	.0344 x 800 =	28
SIC	23	.0381 x 800 =	30	SIC	33	.0473 x 800 =	38
SIC	24	.0210 x 800 =	17	SIC	34	.0736 x 800 =	59
SIC	25	.0173 x 800 =	14	SIC	35	.1284 x 800 =	102
SIC	26	.0251 x 800 =	20	SIC	36	.1554 x 800 =	124
SIC	27	.0440 x 800 =	35	SIC	37	.0458 x 800 =	46
SIC	28	.0736 x 800 =	59	SIC	38	.0658 x 800 =	53
SIC	29	.0173 x 800 =	14	SIC	39	.0592 x 800 =	47

A random number was generated for each of the SIC groups to determine a starting place from which to draw names and every fourth company was drawn from the randomized starting point. The fourth company after the randomized starting point was determined by dividing the number of companies needed by the total number of companies in the SIC groups.

$$\frac{2702}{800} = 3.37 \text{ or } 4$$

Upon completion of the compilation of the sample, a letter was mailed to each firm seeking cooperation (see Appendix 1). The letter explained that in return for cooperation, the firm will obtain useful information concerning its salesforce concerning role clarity, job satisfaction, job performance, and salesperson/sales manager relationships. Further, information will be organized such that the firm may compare their results to other anonymous companies in their industry. An explanation was also included explaining that a copy of the questionnaire will be forwarded to the firm's representative. Each company was asked to duplicate the questionnaire and distribute the questionnaire to the members of their salesforce. The actual number of inquiries returned was 81, for a 10% return rate. Of these 81 companies, 51 actually participated, and met all deadlines. The total number of respondents was 1,393 which was considerably over the minimum required. The total response rate of participating company's salespeople was 60%. Of a possible 2,322 sales employees, 1,393 returned a useable questionnaire.

METHODOLOGICAL PROCEDURE

Upon completion of drawing the sample, letters were mailed to the sample of 800 firms explaining the project, and the benefits the company would receive and asking for the company's cooperation. Directions were also included in the letter explaining exactly what would be required from the company including the approximate date the company would receive the questionnaire and the deadlines for duplicating and distribution of the questionnaire.

At this point, a sample of 81 companies of the 800 expressed interest in participating in the study. About six weeks after the initial mailout, those companies that had expressed an interest in participating were sent a packet, which included a copy of the questionnaire, a cover letter to the salesforce explaining the project, and a set of instructions for the company. The instructions included a reminder of the timetable and emphasized the importance of acting promptly. An initial deadline was set for six weeks after the mailing of the packet. This six-week deadline was later extended to ten weeks to accommodate some problems that some companies were experiencing. Of the 81 companies originally expressing interest, 51 actually participated by duplicating and distributing the questionnaire, and meeting the final deadline. The companies ranged from four salespeople to 250 salespeople. The companies were dispersed among 15 two digit SIC headings and included 27 three digit-headings (see Table 7). Each company is listed by an assigned study number to keep the company annonymous and to ensure the confidentiality of the company. The number of repondents per company is reported in Table 7.

However, orginally there were 6 SIC two digit headings that were not represented. Follow-up correspondence was used in an attempt to elicit company cooperation in these 6 SIC groups. The correspondence added one company, thus leaving 5 SIC groups unrepresented. Therefore, the study technically does not represent all manufacturing industries. The five unrepresented industries include the following: 1) petroleum, 2) tobacco, 3) lumber, 4) furniture and 5) paper. The five unrepresented industries account for a total of only .08 percent of the market in terms of total companies in the population. With the exception of SIC 31, these 5 industries were the smallest of all manufacturing SIC's. The following depicts the percent desired from each group versus the actual collected.

	Desired	Actual		Desired	Actual
SIC 20	.07	.02	SIC 30	.03	.06
SIC 21	.00	.00*	SIC 31	.01	.04
SIC 22	.04	.02	SIC 32	.03	.06
SIC 23	.04	.08	SIC 33	.05	.10
SIC 24	.02	.00	SIC 34	.07	.10
SIC 25	.02	.00	SIC 35	.13	.16
SIC 26	.02	.00	SIC 36	.16	.16
SIC 27	.04	.04	SIC 31	.05	.06
SIC 28	.07	.02	SIC 38	.07	.08
SIC 29	.02	.00	SIC 39	.06	.02

*Less than .01 percent.

The sought percentage and the actual percentage were very close and in a few cases, exact. A chi square analysis indicated that there was no significant difference between the desired sample and the actual sample at a .05 level.

TABLE 7

"IDENTIFICATION OF COMPANIES
AND CORRESPONDING SIC NUMBERS"

SIC NUMBER			TYPE OF PRODUCT	COMPANY IDENTIFICATION	
Group	20	-	Food and Kindred Products		
	208		Beverages	Co. 208	(12)*
Group	22	-	Textile Mill Products		
	224		Narrow Fabrics	Co. 224	(8)
Group	23	-	Apparel and Other Finished Fabric Products		
	232		Men's Youths & Boys	Co. 232A	(52)
			Furnishings	Co. 232B	(34)
	233		Women's, Misses & Juniors	Co. 233	(6)
	234		Women's, Misses, Children's Undergarments	Co. 234	(41)
Group	27	-	Printing, Publishing and Allied Industries		
	273		Books	Co. 273	(34)
	275		Commercial Printing	Co. 275	(7)
Group	28	-	Chemicals and Allied Products		
	281		Industrial Inorganic Chemicals	Co. 281	(14)
Group	30	-	Rubber & Miscellaneous Plastics		
	304		Rubber & Plastic Hose	Co. 304	(4)
	306		Fabricated Rubber Products	Co. 306	(81)
	307		Miscellaneous Plastic Products	Co. 307	(29)
Group	31	-	Leather and Leather Products		
	314		Footwear Except Rubber	Co. 314A Co. 314B	(2)
Group	32	-	Stone, Clay, Glass and Concrete Products		
	322		Glass and Glassware Pressed or Blown	Co. 322	(13)
	324		Cement Hydraulic	Co. 324	(52)
	325		Structural Clay	Co. 325	(24)

TABLE 7 (CONTINUED)

"IDENTIFICATION OF COMPANIES
AND CORRESPONDING SIX NUMBERS"

SIC NUMBER		TYPE OF PRODUCT	COMPANY IDENTIFICATION	
Group	33	- Primary Metal Industries		
	331	Blast Furnaces Steel Works and Misc.	Co. 331A	(52)
			Co. 331B	(9)
			Co. 331C	(23)
	332	Iron and Steel Foundries	Co. 332	(12)
Group	34	- Fabricated Metal Products Except Machinery and Transportation Equipment		
	341	Metal Can & Shipping Containers	Co. 341	(4)
	343	Heating Equipment Except Electrical	Co. 343	(35)
	344	Fabricated Structural Metal Products	Co. 344	(24)
	347	Engraving and Allied Services	Co. 347	(81)
Group	35	- Machinery Except Electrical		
	351	Engines & Turbines	Co. 351	(5)
	352	Farm & Garden Machinery	Co. 352	(76)
	353	Construction Mining and Materials Handling Machinery	Co. 353	(35)
	354	Metal Working Machinery	Co. 354A	(36)
			Co. 354B	(9)
	356	General Industrial Machinery	Co. 356	(7)
	357	Office Computing and Accounting Machines	Co. 357	(74)
Group	36	- Electrical & Electronic Machinery, Equipment		
	362	Electrical Industrial Apparatus	Co. 362	(21)
	363	Household Appliances	Co. 363	(72)
	365	Radio & TV Receiving Equipment Except Communications	Co. 365	(81)
	366	Communication Equipment	Co. 366A	(11)
			Co. 366B	(16)
	367	Electronic Components and Accessories	Co. 367A	(6)

TABLE 7 (CONTINUED)

"IDENTIFICATION OF COMPANIES
AND CORRESPONDING SIC NUMBERS"

SIC NUMBER		TYPE OF PRODUCT	COMPANY IDENTIFICATION	
Group	37	- Transportation Equipment		
	371	Motor Vehicles & Equipment	Co. 371A	(24)
			Co. 371B	(6)
	379	Miscellaneous Transportation Equipment	Co. 379	(14)
Group	38	- Measuring, Analyzing and Controlling Instruments		
	383	Optical Instruments and Lenses	Co. 383	(6)
	384	Surgical, Medical and Dental	Co. 384A	(61)
		Instruments and Supplies	Co. 384B	(11)
Group	39	- Miscellaneous Manufacturing Industries		
	395	Pens, Pencils and Other Office Supplies	Co. 395	(2)

*Number of salespeople in parenthesis.

QUESTIONNAIRE

The questionnaire (see Appendix 2) was divided into eight sections, only two of which were directly analyzed in terms of the dissertation. Parts 1, 2 and 4-7 were designed to gather information about each participating company's salesforce, and as such, were of great concern to the participating firms. The information provided to the participating companies included job satisfaction, role clarity, job performance, communication and power. This information had been promised to the participating firms in return for the opportunity to sample their salesforce. A 60-page report was written, based on the information gathered from these six sections, and then mailed to each participating company.

Section 3 was the basis for the taxonomy and contained 121 activities obtained from the focus groups and personal interviews. This section contained a half-page instruction sheet and example of how to complete the section. They were told that for each activity they should answer three questions:

1. Do you perform the activity or not?
2. If so, how often do you perform the activity in a month's time?
3. If so, how many hours do you spend performing the activity each time the activity is performed?

The first question was answered with a yes-no question and respondents were asked to place an "X" in the appropriate space.

Example: Submit Bids Yes _____

No _____

If the respondent answered "No" they moved forward to the next activity and repeated the same procedure. However, if respondent answered "Yes," then they proceeded to the second question.

For the second question, the respondent was asked to indicate the relative frequency in a month's time that the activity was performed with a "1" being infrequently and "7" being frequently. Frequency was chosen over "importance" as anchor points for three primary reasons: (1) Walker, Churchill and Ford (1979) recommended building a taxonomy of sales activities based on frequency of occurrence. (2) Frequency is more important for descriptive purposes in a taxonomy and "importance" is linked more to job performance. (3) Frequency is more nonevaluative than is importance. For example, report writing may be performed very frequently but some sales reps consider the reports to be unimportant. However, management would certainly disagree with the sales rep concerning the importance of report writing. Frequency, on the other hand, would probably be agreed upon by both parties.

A month's time was chosen because certain activities were not performed daily or weekly. It was felt that the time frame could not be longer than a month without loading the items heavily in the very frequently scale. The pretests indicated that a month was easily understood by the salesforce and was more logical on certain activities such as "attend conferences". An example of the scale to this point would be the following:

Yes _____

Example: Submit Bids No _____ Infrequently 1 2 3 4 5 6 7 Frequently

The third question was used to measure the actual amount of time spent performing the activity in a day's time. Respondents were told the following:

> "On any given day, if you perform an activity, about how long does it take you to complete the activity? Each mark on the scale represents 15 minutes. If the activity takes longer to complete than three hours, specify the length. Place an "X" on the appropriate time that it takes to perform the activity."

An example of the time scale may be found in the following example.

Example: Submit Bids 0 Hr. 1 Hr. 2 Hr. 3 Hrs. (Specify) _____

In pretesting the scale it was found that the vast majority of activities took less than three hours to perform. The 15 minute interval was chosen due to ease of completion by respondents. However, it was recognized that for certain activities, three hours would not be long enough. For activities taking longer than three hours to complete a "specify" blank was included with instructions explaining the purpose of "Specify."

The completed example would be the following:

Example: Submit Bids: Yes _____ Infrequently 1 2 3 4 5 6 7 Frequently

No _____ 0 Hr. 1 Hr. 2 Hrs. 3 Hrs. (Specify) _____

The activities were placed on five pages in an ordered manner to facilitate the ease of completion and to attempt to have respondents decode the activities in a similar manner. For purposes of analysis, respondents were

required to complete the entire scale. If they did not complete the scale, the questionnaire was disregarded. (A "No" answer was considered as having completed the scale.)

The last part of the questionnaire contained standard demographic questions. Respondents were asked questions concerning birth date, sex, race, marital status, children, the number of full-time jobs previously held, length of time with present company, education and income. In addition, the name of the company was printed on the questionnaire and assigned a specific number and SIC code number. The last blank was for the name of the respondent. The name was required in order to keep a list of cooperating salespeople. The respondents were told that the list would be returned to the home office but assured that their individual responses would remain anonymous.

DEMOGRAPHICS

A number of questions were used to assess the demographics of the sales representatives. The questions dealt with the respondent's (a) age, (b) sex, (c) race, (d) educational level, (e) marital status, (f) number of children, (g) number of previous jobs, (h) length of time with company, (i) length of time in present position with company, (j) education and (k) income. In addition, all respondents were assigned a number representing the company they represented and a SIC number representing the industry of the company.

The first demographic variable was age, and the responses age, ranged from 21 to 81. The responses were placed into categories as is shown in Table 8. With the exception of people under 25, all age brackets were well represented with a minimum response of 124 salespeople and a maximum of 266 salespeople.

The respondents were almost exclusively male (96.1%). Only 54 of the 1393 respondents were female. Race had an even more dramatic finding in that 98% of all responding salespeople were Caucasian. The vast majority of the sales reps were married (83.7%) with 79.8% of the reps having at least one child.

The mean response of salesreps with previous full-time jobs was 1.75. Of the respondents answering, 34% had been with the company three years or less. The median score for amount of time employed by the company was 5 years. When asked about time spent on their present job within the company 40% replied three years or less. However, only 4.9% of respondents had been on the job less than 6 months.

The educational levels of respondents were relatively high with 85.6% of respondents having at least some college, while 44% had a college degree and 14% had a graduate degree.

The Income question asked respondents to round their income to the nearest hundred. The responses ranged from under $15,000 to a high of $231,000. Fifty-two percent of the respondents earned between $25,000 and $45,000, while approximately 25% made below that figure and the other 25% earning about $45,000.

In summary, the "average" salesperson was caucasian, male, about 39, married with one to two children. The typical salesrep had held one to two previous jobs, while employed at their present job about five years. Finally, the salesrep was college educated and earned about $38,000.

TABLE 8

OVERALL COMPOSITE

AGE

	# of Resp.	%		# of Resp.	%
20 Years or Younger:	1	0.0%	41-45:	195	14.2%
21-25:	43	3.0%	46-50:	148	10.8%
26-30:	137	12.6%	51-55:	124	9.0%
31-35:	266	19.4%	56-Over:	173	12.6%
36-40:	250	18.2%	No Response:	20	

SEX

Male: 1,322 (96.1%) Female: 54 (3.9%)

No Response: 17

RACE

Black:	19	(1.5%)	White:	1,345	(98.0%)
Other:	7	(.5%)	No Response:	21	

MARITAL STATUS

Single:	122	(8.9%)
Married:	1,154	(83.7%)
Separated/Divorced:	92	(6.7%)
Widowed:	6	(.4%)
No Response:	15	

CHILDREN

None:	277	(20.13%)	Three:	257	(18.7%)
One:	187	(13.6%)	Four or More:	198	(14.2%)
Two:	457	(33.2%)	No Response:	17	

PREVIOUS FULL-TIME JOBS

Mean = 1.75

TABLE 8 (CONTINUED)

OVERALL COMPOSITE

Category	Numbler of Resps.	Percent
0	335	24.5%
1	353	25.8%
2	310	22.6%
3	201	14.7%
4	101	7.4%
5	32	2.3%
6	23	1.7%
7	3	.2%
8	4	.3%
9	8	.6%
No Response:	23	---

LENGTH OF TIME WITH COMPANY:

Years	Number of Resps.	Percent
0-5:	644	46.9%
6-10:	285	20.7%
11-15:	174	12.7%
16-20:	122	8.9%
21-25:	64	4.7%
26-30:	42	3.1%
31-35:	29	2.1%
36-Over:	14	1.0%
No Response:	19	---

TIME ON PRESENT JOB:

Years	Number of Resps.	Percent
0-5:	732	53.3%
6-10:	639	19.6%
11-15:	162	11.8%
16-20:	95	6.9%
21-25:	59	4.3%
26-30%:	39	2.8%
30-Over:	18	1.3%
No Response:	19	---

TABLE 8 (CONTINUED)

OVERALL COMPOSITE

EDUCATION

Some High School:	26	(1.9%)
HighSchool Graduate:	170	(12.5%)
Some College:	350	(25.5%)
College:	601	(44.0%)
Graduate Work:	206	(14.0%)
No Response:	32	

INCOME

	Number of Resps.	Percent
$15,000 and Under:	39	(2.90%)
$15,001 - $25,000:	288	(21.50%)
$25,001 - $35,000:	477	(32.60%)
$35,001 - $45,000:	257	(19.20%)
$45,001 - $55,000:	121	(9.00%)
$55,001 - $65,000:	64	(4.90%)
$65,001 - $75,000:	43	(3.20%)
$75,001 - $85,000:	34	(2.60%)
$85,001 - $95,000:	22	(1.60%)
$95,001 - $105,000:	22	(1.60%)
$105,001 and Over:	11	(.08%)

ANALYSIS

Grouping Related Activities

The first step in the analysis stage was the grouping of related activities. This was accomplished by running a common-factor analysis using communality estimates in the main diagonal of the correlation matrix. Factor analysis was conducted separately on the frequency and time scales due to the conceptual distinctions of the two scales.

Factor analysis was used in order to group activities together based on a pattern of similarities in terms of both frequency and time. Factor analysis was chosen as the primary analytical technique for a number of reasons. First, factor analysis has been used to "purify" scale items by identifying and separating appropriate items, and by establishing dimensions of the measure (Churchill, 1979). A prime example of the use of factor analysis may be found in the development of psychographics by Wells (1971). Well's development of a psychographic scale was a three step process which included the following:

1) Development of a number of statements reflecting a person's activities, interests and opinions.

(2) Administration of the list of a sample of respondents.

(3) Factor-analysis of responses to construct profiles.

This present dissertation is following a similar pattern in that a number of activities were collected for use in a classification system. The list was

administered to a sample of salespeople and the factor analysis was used to group activities and build a profile of sales activities.

An early example of the emphasis on factor analysis in scale development can be found in the development of the semantic differential scales by Osgood, Suci, and Tannenbaum (1957). Other uses of factor analysis in marketing include customer preferences for particular products (Harper, 1956); customer preferences for institutions (Easton, 1968); assessment of company image (Stephenson, 1965); the effect of advertisements on readership (Twedt, 1952); the assessment of job satisfaction in an industrial salesforce (Churchill, Ford and Walker, 1974); and grouping people based on similarities in behavior (Bass, Pessimier and Tigert, 1969). It is essential that the 121 activities be grouped into a number of condensed groups that are based on a pattern of similarities. Thus, a second reason for the use of factor analysis was for a reduction of redundancy.

The most commonly used technique, Latent Root Criterion, was used to originally determine the number of factors to retain for further analysis and interpretation. An eigenvalue of one was used as a cutoff level. The initial principal components were then rotated using a varimax rotation. Once the number of factors was determined, reliabilities were assessed using Cronbach's alpha coefficients. If any variables or factors were low on the alpha results, they were eliminated and factors were run a second time.

The Grouping of Salespeople

The second major section of the analysis was the grouping of salespeople. It was important in the development of the taxonomy to group the salespeople into clusters based on the similarities of their responses to the

activities. Cluster analysis has not been as widely deployed as other multivariate techniques such as factor analysis or discriminant analysis, but cluster analysis has been a pivotal analytical step in a number of studies (Churchill, 1979). Cluster analysis has been used in test markets (Green, Frank and Robinson, 1967; Doyle and Hutchinson, 1976); and to improve market experimentation for new products by market segments (Day and Heller, 1971). Other cluster studies include: clustering television programs by listening habits (Frost, 1969); the examination of demand patterns for electricity (Boggis and Held, 1971); the examination of homogeneous census tracts (Kernan and Bruce, 1972); construction of market segments (Lessig and Tollefson, 1971); personality profiles (Kernan 1968); and the grouping of products, consumers, institutions, or countries (Darden and Flaschner, 1974; Johansen and Moinpour, 1977; Mahajan and Jain, 1978; Yoemans and Golder, 1975).

Cluster analysis is not without its share of problems. One problem with cluster analysis has been the lack of definition as to the overall purpose and goals of cluster analysis. Most agree that the primary purpose is to define homogeneous groups, but beyond this single purpose cluster analysis has not been extensively defined. Because of the lack of specificity in goals, a number of cluster programs have been written. As the number of cluster programs have increased, the number of critics of cluster analysis has also increased.

The function of cluster analysis is basically to identify and classify objects. This study uses cluster analysis to establish homogeneous groups of salespeople. These groups or clusters would be the basis of the taxonomy.

Each item should possess a high degree of similarity with other items in the same cluster based on some selection criterion. Due to the large number of variables (factors) and the large number of respondents (1400), a "Fastclus" procedure was instituted. The Fastclus procedure is a Statistical Analysis System (SAS) method to accomplish the clustering procedure. The fastclus procedure was appropriate because of its capability to accommodate 1400 respondents (SAS, 1983).

Thus, the second major step in the analysis of this dissertation consisted of running a Fastclus analysis on the respondents participating in the study based on each respondent's factor scores. The factor scores represent each respondent's rating of the 121 activities. When the activities were factored, each respondent had a factor score for each activity across the factor. It is these factor scores that are clustered.

At this point, there were two "groups". The first group was comprised of factors based on a pattern of similar activities. The second group was salespeople who were clustered together based on their factor scores.

Merging of Salespeople with Group Activities

This third step in the analysis provides a link between the groups of salespeople and the groups of sales activities. Two multivariate analysis techniques were used for this section.

The first technique applied was stepwise discriminant analysis. The discriminant analysis was conducted using factor scores as the predictor variables and the cluster membership as the criterion variable. The stepwise discriminant analysis indicated the ranking in terms of importance based on F

scores. The stepwise was important for two reasons. First, it indicated significant differences among the factors. Second, it ascertained which factors were more discriminating in terms of the composition of each cluster group.

The second technique in this section consisted of analysis of variance with a Duncan's multiple range test. The ANOVA-Duncan provided the link between the activities and the clustered salespeople by indicating which factors were significantly different among the clusters.

Identification of the Composition of Each Cluster

The final step in the analysis was identifying the demographic composition of each of the clusters. This was provided by running a crosstab between the clusters and the demographic variable including the company and SIC number. This step allowed for a synopsis of each cluster in terms of its demographic profile.

Limitations

There are certain qualifications or limitations concerning the study that should be noted. A conceptual limitation concerns the issue of sampling. This study incorporates answers from 51 diverse companies, representing a variety of industries. The question that must be raised is whether a different set of 51 companies would provide the same results. There are a number of examples where two companies in the same industry produce very diverse responses. This is quite possibly due to company management's policy and difference in emphasis. One goal of sampling in the dissertation was to

obtain a stratified systematic sample of the SIC group known as "Manufacturing." If the responses are somewhat situational in nature, then a different set of companies representing the same industries could potentially produce some differences. These potential situational differences could then be a limitation.

There was also very little control over who responded to the study. When company "A" agreed to participate, the questionnaire was distributed to their salesforce by the company and then each individual salesperson decided whether to cooperate or not. It is difficult to know if all of the company's salesforce received a questionnaire. Another potential bias, was the emphasis or pressure placed upon the salespeople to respond. Many companies strongly urged or insisted the questionnaire be completed, while other companies placed less pressure on their salespeople to respond.

Another problem concerned the length of the questionnaire. The questionnaire took about 35 to 45 minutes to complete. There were also 121 activities that had to be answered on two scales, plus seven other sections of job satisfaction, clarity, power and management questions. The length of the activity section in particular proved to be monotonous and tiring for many of the respondents. As such, the quality of answers varied.

There is also a temporal problem. Activities that are frequently performed today may not be as necessary five years from now. With a continued emphasis on the computer, and advanced technology, some of the activities of today may cease to be, while other new activities may emerge.

CHAPTER FOUR

ANALYSIS OF THE DATA

The purpose of this chapter is to report the results of the various multivariate and statistical tests conducted on the "time" scale and also on the "frequency" scale; in addition to any relevant demographic findings. This chapter will be divided into two major sections with a number of subsections in each section, and will consist of the following:

1. FREQUENCY SCALE
    a. Group Related Activities
    b. Formation of Sales Groups
    c. Merging of Clusters with Group Activities
    d. Identification of Clusters
    e. Discussion and Conclusions
2. TIME SCALE
    a. Group Related Activities
    b. Formation of Sales Groups
    c. Merging of Clusters with Group Activities
    d. Identification of Clusters
    e. Discussion and Conclusions
3. DEMOGRAPHICS

FREQUENCY SCALE

Group Related Activities

The first major step of the analysis consisted of grouping related activities. This step was accomplished by conducting a factor analysis of the 121 activities (see Appendix 3 for a listing of the activities). The frequency scale was a seven point scale ranging from infrequently to very frequently (coded as 1 to 7). If respondents indicated that they did not perform the activity, they were coded as a zero. The mean and standard deviation of each activity may be found in Table 9. A key for the activity labels may be found in Appendix 3.

The factor analysis was conducted on 1,281 observations with 112 respondents omitted due to missing data. The initial factor method was principal axis followed by a varimax rotation. The principal axis technique was chosen because it leads to unique, reproducible results. With principal axis, the variables are depicted as a set of orthogonal linear combinations of those variables. (Green & Tull, 1978). The varimax rotation was used to simplify the columns of the factor matrix and has been the most widely used method of rotation. The varimax rotation also has a tendency to produce some high loadings and some near zero loadings on each factor (Hair et. al., 1979 and Green and Tull, 1978).

By using principle components, 121 factors were extracted as displayed in Table 10. However, by instituting the Latent Root Criterion, the 121 factors were reduced to 27. The Latent Root Criterion is the most commonly used

method of extraction, using an eigenvalue of one as the cutoff level. An eigenvalue of one is justified because each factor should be able to explain at least the variance of a single variable or item. Given 27 factors and an eigenvalue of 1, 58.8% (Table 10) of the variance was explained. This level of explained variance was somewhat low. However, Hair and others (1979) state, "It is not uncommon for the analyst to consider a solution which accounts for 60% of the total variance (and in some instances even less) as a satisfactory solution."

TABLE 9

*MEANS AND STANDARD DEVIATION OF ACTIVITIES - FREQUENCY

	ROUTINE	SELLACT	SPLAN	HEPLAN	SEARCH	CALLEX	CALLPO	CALLNEW	IDAUT	VERIFY
MEAN	5.81	5.45	1.17	3.59	0.39	6.20	0.51	0.46	5.23	2.11
STD DEV	1.60	1.90	1.71	2.20	2.19	1.08	2.06	2.15	2.23	2.59
	SPRES	DISPL	SELECT	MAKEPRE	CONDUCT	AID	PREDICT	CLOSURE	OVER	SELLD
MEAN	0.37	2.06	0.17	5.03	2.97	0.12	2.69	0.28	5.02	2.96
STD DEV	2.09	2.19	2.79	2.01	2.55	2.58	2.60	2.36	1.85	2.98
	SELLC	FIND	EXPD	HAND	REPART	ORDAC	WRITE	FOLLOW	SAMPLE	SITES
MEAN	3.02	2.50	3.35	1.87	1.09	1.67	3.98	0.21	1.98	1.30
STD DEV	2.88	2.26	2.01	2.27	1.83	2.11	2.69	2.21	2.20	2.10
	INSTAL	TEST	BE	TECHINF	LEARN	BACKGR	MAINT	TRENDS	NEEDS	MODIFY
MEAN	0.89	0.98	0.91	0.51	1.40	2.30	0.73	3.72	0.33	2.29
STD DEV	1.77	1.81	1.57	2.26	1.90	2.23	1.50	2.20	2.13	2.00
	SHOW	INTRO	CREDIT	BIDS	LOOKP	CONTACT	YOU	FIGURE	FINDD	PASTDUE
MEAN	3.72	0.07	2.87	2.87	0.23	2.33	0.32	0.70	0.30	1.58
STD DEV	2.09	2.25	2.76	2.60	2.62	2.27	1.17	1.67	1.32	1.96
	SHIP	TAILOR	DELIV	STOCK	PROTR	INVEN	FORCST	NUREP	TRAINU	ATTRN
MEAN	2.60	3.20	0.60	0.75	2.91	2.10	3.02	0.56	1.33	2.23
STD DEV	2.15	2.50	1.01	1.70	2.93	2.53	2.00	1.31	1.93	1.79
	USING	TRAINC	TEACH	PROFEED	RECFEED	SURVEY	PROVINF	LSM	RSM	SCONF
MEAN	1.80	2.20	0.70	0.38	0.81	2.35	3.52	1.35	2.30	2.11
STD DEV	2.35	2.08	1.58	1.99	2.03	2.15	2.21	2.18	1.98	1.91
	CLCONF	SEMNAR	SPEECH	REVIEW	COLIT	TRADE	MONITOR	FOACT	FOEXP	FOPO
MEAN	1.67	1.33	0.68	3.55	3.21	0.80	0.33	3.15	0.82	1.96
STD DEV	1.89	1.79	1.29	2.36	2.00	2.28	2.17	2.39	2.70	2.57
	FOCR	QAIRE	LUNCH	PARTY	GOLF	DRINK	EAT	ONSITE	AFTHR	HOME
MEAN	1.77	1.52	0.58	0.30	1.03	2.12	2.23	1.69	0.99	0.83
STD DEV	2.17	1.70	1.97	1.20	1.79	2.00	1.91	2.01	1.99	2.63
	NIGHT	SETUP	XMAS	MEMO	LETTER	OFFICE	TRAVOUT	TRAVIN	SUPER	TRAVTR
MEAN	3.97	1.05	2.81	3.37	3.69	2.75	5.02	0.78	1.88	0.88
STD DEV	2.00	1.92	2.60	2.06	2.20	2.80	2.26	2.50	1.58	1.46
	LOAD	GIVE	COOPD	CHECKIN	KEEP	FILE	INVOICE	PRF	BSWI	BSWO
MEAN	3.11	3.79	3.36	0.50	0.33	3.92	3.32	3.57	0.90	1.00
STD DEV	2.91	2.50	2.09	2.26	2.51	2.65	2.91	2.81	1.72	1.90
	FLATTER	POR	FLYER	SHOWS	AD	PHORD	PHMIN	PHAP	PHFUC	PROBE
MEAN	3.03	1.53	3.77	1.62	1.11	0.86	1.78	5.12	0.72	3.30
STD DEV	2.56	2.30	2.58	1.92	2.00	2.09	2.33	2.09	2.23	2.06
	LEGAL									
MEAN	0.99									
STD DEV	1.68									

TABLE 10

INITIAL FACTOR METHOD - FREQUENCY

	1	2	3	4	5	6	7	8
EIGENVALUES	18.99	6.53	4.72	3.69	3.35	2.67	2.28	2.24
PORTION	0.15	0.05	0.03	0.03	0.02	0.02	0.01	0.01
CUM PORTION	0.15	0.21	0.25	0.28	0.30	0.33	0.34	0.36
	9	10	11	12	13	14	15	16
EIGENVALUES	2.05	1.95	1.86	1.73	1.58	1.54	1.49	1.38
PORTION	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
CUM PORTION	0.38	0.40	0.41	0.43	0.44	0.45	0.46	0.48
	17	18	19	20	21	22	23	24
EIGENVALUES	1.37	1.30	1.27	1.26	1.19	1.17	1.15	1.14
PORTION	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00
CUM PORTION	0.49	0.50	0.51	0.52	0.53	0.54	0.55	0.56
	25	26	27					
EIGENVALUES	1.08	1.04	1.00					
PORTION	0.00	0.00	0.00					
CUM PORTION	0.57	0.58	0.58					

Each factor was then examined in order to look for the variables with the highest loadings. Any variable with a loading of over $\pm$.30 was included in further analysis. A $\pm$.30 loading factor has also been accepted in previous research (Hair et.al., 1979; Nunnally, 1967, p. 356).

The Cronbach's alpha was examined for each of the factors to determine the reliability coefficient (Nunnally, 1967 p. 196; Schul, 1980). The alpha indicates how consistent the scale score is in the population of objects measured. The variables within the factors were examined to see if a deletion of a variable would raise the alpha to a .5 or greater. The .5 level was chosen as acceptable based on Nunnally (1967). Any factor which did not have an alpha level of at least .5 was discarded. Each variable of each factor was tested to determine if deletion would increase the alpha coefficient score. The list in Table 11 is the combination of variables that represent the best possible reliability as measured by the adjusted alpha coefficients.

A second factor analysis was run using the remaining variables and factors. Factor 21 and its four variables were eliminated from further analysis. Factor 7's three variables, however, loaded on two other factors and as such could not be eliminated. The two variables (stocking and delivering) were of importance in the composition of factor 3 and factor 4. However, factor 7 was not used in subsequent analysis.

TABLE 11

"ALPHA SCORES FOR FACTORS 1-27 - FREQUENCY"

		Alpha	Activities	Variables
FACTOR	1	.8458	13	9, 11-19, 41-42, 103
FACTOR	2	.6956	3	58-59, 100
FACTOR	3	.8297	11	25-26, 31-33, 35, 37, 53, 61-63
FACTOR	4	.8115	10	1, 4, 27, 49, 56, 80, 107, 112, 115, 117
FACTOR	5	.8214	6	22-24, 28, 51-52
FACTOR	6	.5876	5	66, 79, 82, 99, 104
*FACTOR	7	.4335	2	53-54
FACTOR	8	.7686	5	83-87
FACTOR	9	.7664	2	91, 97
FACTOR	10	.7640	6	60, 69-71, 74, 114
FACTOR	11	.6783	6	43-44, 46-48, 50
FACTOR	12	.7787	6	36, 38-39, 41, 57, 77
FACTOR	13	.7562	4	116,118-120
FACTOR	14	.7109	2	55, 20
FACTOR	15	.7227	2	94-95
FACTOR	16	.5299	3	109-111
FACTOR	17	.7678	4	5, 7-9
FACTOR	18	.7400	3	105-107
FACTOR	19	.5940	2	72-73
FACTOR	20	.7801	2	1-2
*FACTOR	21	.4300	4	6, 93, 98, 108
FACTOR	22	.5831	4	4, 78-79, 113
FACTOR	23	.6676	2	25-26
FACTOR	24	.6883	2	102-103
FACTOR	25	.5231	2	89-90
FACTOR	26	.8059	6	64-65, 74-77
FACTOR	27	.5042	2	30, 88

*Denotes factors that were eliminated due to reliability analysis.

TABLE 12

"ACTIVITIES AND THEIR CORRESPONDING VARIABLE NUMBER"

VARIABLE	ACTIVITY CODE		ACTIVITIES
1.	Routine	-	Plan daily routine.
2.	Sellact	-	Plan selling activities.
3.	Splan	-	Help company management design sales plan.
4.	Heplan	-	Help clients plan.
5.	Search	-	Search out leads for prospects.
6.	Callex	-	Call on existing accounts.
7.	Callpo	-	Call on potential accounts.
8.	Callnew	-	Call on new accounts.
9.	Idaut	-	Identifying the person with authority to make purchasing decisions.
10.	Verify	-	Verify commissions.
11.	Spres	-	Prepare sales presentation.
12.	Displ	-	Design or prepare visual displays to be used for the presentation.
13.	Select	-	Select which products to take on call.
14.	Makepre	-	Make sales presentation.
15.	Conduct	-	Conduct demonstrations of product.
16.	Aid	-	Use some type of "aid" in presentation.
17.	Predict	-	Predict closure dates.
18.	Closure	-	Make closure and obtain order.
19.	Over	-	Overcome objections.
20.	Selld	-	Sell to distributors/middlemen.
21.	Sellc	-	Sell to ultimate consumer.
22.	Find	-	Correct orders--find lost orders.
23.	Expd	-	Expedite orders.
24.	Hand	-	Handle back orders.
25.	Repart	-	Order repair parts.
26.	Ordac	-	Order accessories.
27.	Write	-	Write-up orders.
28.	Follow	-	Follow-up client's order.
29.	Sample	-	Order samples.
30.	Sites	-	Examine sites prior to installation.
31.	Instal	-	Supervise installation of equipment.
32.	Test	-	Test equipment or product.
33.	Be	-	Be present during repairs or maintenance.
34.	Technif	-	Provide customers with technical information on company products.
35.	Learn	-	Learn about product by watching technician.
36.	Backgr	-	Research client's background.
37.	Maint	-	Perform maintenance on products.

TABLE 12 (CONTINUED)

"ACTIVITIES AND THEIR CORRESPONDING VARIABLE NUMBER"

VARIABLE	ACTIVITY CODE		ACTIVITIES
38.	Trends	-	Study trends in market or trends in client.
39.	Needs	-	Study client's procedures or needs.
40.	Modify	-	Modify product and/or systems to meet needs of client.
41.	Show	-	Show how product coordinates with client's existing line.
42.	Intro	-	Introduce new products to clients.
43.	Credit	-	Handle pricing and credit.
44.	Bids	-	Submit price proposals/bids.
45.	Lookp	-	Look-up price in company catalogue.
46.	Contact	-	Contact company personnel to determine price.
47.	You	-	You alone determine price of product, independent of company/catalogue.
48.	Figure	-	Figure up bills.
49.	Findd	-	Help clients find financing.
50.	Pastdue	-	Collect past due accounts.
51.	Ship	-	Handle shipment problems.
52.	Tailor	-	Tailor deliveries to customer needs.
53.	Deliv	-	Make deliveries.
54.	Stock	-	Stock shelves with product.
55.	Prdtr	-	Establish good relations with physical distributors.
56.	Inven	-	Take inventory for client.
57.	Forcst	-	Forecast demand.
58.	Nurep	-	Look for new sales reps.
59.	Trainu	-	Train new sales people.
60.	Attrn	-	Attend periodic training sessions.
61.	Using	-	Practice using product.
62.	Trainc	-	Train customers to use equipment or product.
63.	Teach	-	Teach safety instructions.
64.	Profeed	-	Provide feedback to superiors.
65.	Recfeed	-	Receive feedback from clients.
66.	Survey	-	Assist management in market surveys.
67.	Provinf	-	Provide information to other salespeople.
68.	LSM	-	Attend local office sales meetings--weekly or monthly.
69.	RSM	-	Attend regional or district sales meetings.
70.	Sconf	-	Attend sales conferences and conventions.
71.	Clconf	-	Work client conferences and conventions.
72.	Semnar	-	Provide seminars and/or speakers for clients.
73.	Speech	-	Make guest speeches.
74.	Review	-	Review your company's new products.

TABLE 12 (CONTINUED)

"ACTIVITIES AND THEIR CORRESPONDING VARIABLE NUMBER"

VARIABLE	ACTIVITY CODE		ACTIVITIES
75.	Colit	-	Read company literatures.
76.	Trade	-	Read trade publications.
77.	Monitor	-	Review and monitor competitor's products.
78.	Foact	-	Fill out reports on sales activities.
79.	Foexp	-	Fill out expense accounts.
80.	Fopo	-	Fill out purchase orders.
81.	Focr	-	Fill out credit forms.
82.	Qaire	-	Fill out questionnaires.
83.	Lunch	-	Take clients to lunch.
84.	Party	-	Throw parties for clients.
85.	Golf	-	Entertain clients with leisure activities (golf, fishing, etc.).
86.	Drink	-	Take clients out for a drink.
87.	Eat	-	Take clients to dinner (evening meal).
88.	Onsite	-	Take clients on site to review product in use.
89.	Afthr	-	Work "after hours".
90.	Home	-	Work out of home.
91.	Night	-	Spend night/nights on road.
92.	Setup	-	Set-up appointments through mail.
93.	Xmas	-	Send Christmas cards, calendars, etc. to clients.
94.	Memo	-	Send out memos.
95.	Letter	-	Write letters.
96.	Office	-	Travel to office.
97.	Travout	-	Travel in town.
99.	Super	-	Travel with supervisors.
100.	Travt	-	Travel with trainees.
101.	Load	-	Load vehicle with product, demonstrators, etc.
102.	Give	-	Give orders/requests to company support people.
103.	Coord	-	Coordinate activities with company support people.
104.	Checkin	-	Check in with your supervisor.
105.	Keep	-	Keep office in order.
106.	File	-	File.
107.	Invoice	-	Keep track of invoices.
108.	PR	-	Do company public relations work.
109.	Bswi	-	Politicking within your company.
110.	Bswo	-	Politicking outside your company.
111.	Flatter	-	Flatter clients.
112.	Pop	-	Set-up point of purchase displays.
113.	Flyer	-	Distribute flyers, brochures.

TABLE 12 (CONTINUED)

"ACTIVITIES AND THEIR CORRESPONDING VARIABLE NUMBER"

VARIABLE	ACTIVITY CODE		ACTIVITIES
114.	Shows	-	Set-up exhibitions for trade shows.
115.	Ad	-	Handle local advertising.
116.	Phord	-	Phone office for orders, messages.
117.	Phmtn	-	Phone for service/maintenance.
118.	Phap	-	Phone to set-up appointments.
119.	Phfuc	-	Phone to follow-up on calls.
120.	Probe	-	Make probing phone calls.
121.	Legal	-	Determine legalities--check government regulations.

The second factor analysis produced similar results but the factors were reduced by two, thus leaving a total of 25 factors. The explained variance increased to 60% as shown in Table 13 in the cumulative portion row. The final alpha scores (Table 14) produced results similar to the original alphas.

The following is a brief description of each factor and the activities that had a loading of at least $\pm$.30. Each activity's factor loading is given, as well as the mean and standard deviation for that activity. It should also be noted that each of the variables loaded significantly ($\pm$.30) only on one factor.

Interpretation of Factors

FACTOR 1 - "THE SELLING FUNCTION" - This factor, as shown below, contained activities that are considered to be the basic steps in selling. The process began with "selecting products to take on call", then "preparing the sales presentation", and actually "making the presentation" along with "conducting demonstrations". This factor also included "introducing new products", "overcoming objections", and lastly, "closing the sale". All of the activities in Factor 1 are steps contained in the selling process, and totaled 10 items. These activities were very similar as to those found in the A priori conceptual scheme, which was entitled "Sales Presentations."

	LOADING	FREQUENCY MEAN	STD. DEV.
Select Products To Take On Call	.6295	4.18	2.80
Make Sales Presentation	.5834	5.45	2.00
Conduct Demonstrations	.4924	2.95	2.56
Use An Aid In Presentation	.5277	4.13	2.60
Make Closure	.5534	4.28	2.36
Overcome Objections	.5126	5.03	1.85
Predict Closure	.3223	2.71	2.65
Introduce New Products	.5600	4.43	2.26
Show How Product Coordinates	.4735	3.72	2.50
Design Visual Displays	.3429	2.07	2.20

TABLE 13

"EIGENVALUES OF SECOND FACTOR ANALYSIS - FREQUENCY"

	1	2	3	4	5	6	7	8
EIGENVALUES	16.94	5.90	4.50	3.51	3.14	2.52	2.17	1.99
PORTION	0.15	0.05	0.04	0.03	0.02	0.02	0.02	0.01
CUM PORTION	0.15	0.21	0.25	0.28	0.31	0.34	0.36	0.38
	9	10	11	12	13	14	15	16
EIGENVALUES	1.92	1.85	1.74	1.65	1.50	1.44	1.39	1.33
PORTION	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
CUM PORTION	0.39	0.41	0.41	0.44	0.46	0.47	0.48	0.50
	17	18	19	20	21	22	23	24
EIGENVALUES	1.25	1.22	1.2	1.19	1.14	1.11	1.09	1.04
PORTION	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
CUM PORTION	0.51	0.52	0.53	0.54	0.55	0.56	0.57	0.58
	25							
EIGENVALUES	1.02							
PORTION	0.01							
CUM PORTION	0.59							

TABLE 14

"ALPHA SCORES FOR REVISED FACTORS - FREQUENCY"

		Alpha	Activities	Variables
FACTOR	1	.8192	10	12-19, 41-42,
FACTOR	2	.7687	5	83-87
FACTOR	3	.8297	11	25-26, 31-33, 35, 37, 53, 61-63
FACTOR	4	.8145	10	4, 27, 49, 54, 56, 80-81, 107, 112, 115,
FACTOR	5	.8214	6	22-24, 28, 51-52
FACTOR	6	.5832	4	45, 78-79, 113
FACTOR	7	.4335	3	53-54, 49
FACTOR	8	.6956	3	58-59, 100
FACTOR	9	.7640	6	60, 69-71, 74, 114
FACTOR	10	.6783	6	43-44, 46-48, 50
FACTOR	11	.7664	2	91, 97
FACTOR	12	.5299	3	109-111
FACTOR	13	.7509	5	36, 38-39, 41, 57
FACTOR	14	.7562	4	116, 118-120
FACTOR	15	.7110	2	20, 55
FACTOR	16	.7678	4	5, 7-9
FACTOR	17	.5940	2	72-73
FACTOR	18	.7227	2	94-95
FACTOR	19	.5231	2	89-90
FACTOR	20	.7400	3	105-107
FACTOR	21	.5379	3	30, 68, 88
FACTOR	22	.7801	2	1-2
FACTOR	23	.6883	2	102-103
FACTOR	24	.5877	3	66, 82, 99,
FACTOR	25	.8059	6	64-65, 74-77

FACTOR 2 - "ENTERTAINING" - These five activities were all entertainment oriented and all loaded at least .61 or higher. The activities centered around taking clients out to eat, drink, or to be entertained in other activities such as parties or golf. This grouping was identical to the one in the apriori section entitled "socializing."

	LOADING	FREQUENCY MEAN	STD. DEV.
Take Clients To Lunch	.6124	4.58	1.97
Throw Parties For Clients	.6146	0.54	1.20
Entertain Clients - Golf, Fishing, Etc.	.7536	1.45	1.80
Take Clients For A Drink	.7181	2.12	1.99
Take Clients Out For Evening Meal	.7105	2.22	1.92

FACTOR 3 - "SERVICING THE PRODUCT" - Factor 3 contained eleven items. These activities or items are post-selling activities such as "performing maintenance", "installing equipment", "testing the product", and "be present during repairs". In addition, the salesperson "trains the customer" and "teaches safety". Finally, the salesperson orders any accessories and repair parts. This factor tends to be of the technical nature because the salesperson must perform the activity for the customer.

The apriori section had a similar category but contained only six activities rather than eleven. The apriori was concerned primarily with the technical aspect and not as much with the service aspect.

	LOADING	FREQUENCY MEAN	STD. DEV.
Test Equipment Or Product	.7241	0.98	1.82
Be Present During Repairs	.7155	0.92	1.58
Supervise Installation	.6799	0.88	1.76
Learn About Product By Watching Technician	.4345	1.42	1.93
Perform Maintenance	.7178	0.74	1.52
Make Deliveries	.4765	0.64	1.39
Train Customers To Use Product	.5187	2.18	2.48
Teach Safety Instructions	.5408	0.71	1.61
Order Repair Parts	.4386	1.08	1.82
Practice Using Product	.4072	1.78	2.35
Order Accessories	.4362	1.67	1.82

FACTOR 4 - "SERVICING THE ACCOUNT" - Factor 4 is similar to Factor 3 because they were both service-oriented but Factor 4 was concerned more with the client and less with the product. The salesperson handles inventory, promotional work (point of purchase and advertising), credit, stocks shelves, and helps clients to plan. This type of salesperson, based on the activities involved, must build a fairly close relationship with clients.

Servicing the account did not have a direct contrast in the apriori section. The Promotion group was closest to Factor 4, but it did not include the service aspect.

	LOADING	FREQUENCY MEAN	STD. DEV.
Take Inventory For Clients	.7147	2.11	2.53
Set-Up Point Of Purchase Displays	.7300	1.51	2.30
Handle Local Advertising	.6179	1.11	2.00
Write-Up Orders	.5538	3.93	2.71
Fill Out Purchase Orders	4924	1.94	2.57
Fill Out Credit Form	.4757	1.74	2.16
Help Customers Plan	.3597	3.59	2.24
Stock Shelves	.3972	0.76	1.72
Help Clients Plan	.3597	3.60	2.24
Help Clients Find Financing	.3051	1.35	0.54

FACTOR 5 - "WORKING WITH ORDERS" - All six of these activities were directly related to orders, including delivery and shipment problems. Primarily, this factor was concerned with problems encountered in the ordering process, such as correcting orders, expediting, and handling back orders.

The working with orders factor was very similar to group 3 in the apriori section.

	LOADING	FREQUENCY MEAN	STD. DEV.
Correct Orders	.7002	2.49	2.27
Expedite Orders	.7674	3.36	2.44
Handle Back Orders	.7715	1.88	2.29
Follow-Up Clients Orders	.5413	4.19	2.23
Handle Shipment Problems	.6204	2.63	2.17
Taylor Deliveries to Customers	.3728	3.18	2.51

FACTOR 6 - "MISCELLANEOUS" - This factor contained four items that are day-to-day activities and that are rather monotonous. The salespeople fill out their expense accounts and sales activity reports. They also must look up the price of products in catalogs and finally distribute flyers.

	LOADING	FREQUENCY MEAN	STD. DEV.
Distribute Flyers	.5929	3.77	2.58
Fill Out Expense Accounts	.3257	4.82	2.73
Fill Out Reports On Sales Activities	.3252	5.15	2.39
Look Up Price	.5139	4.19	2.62

FACTOR 7 - Factor 7 consisted of three variables, all of which loaded highly on other factors and as such has been eliminated. Also the alpha (.43) on this

factor was lower than the designated .5 cut-off level for alphas. However, the three activities consisted of the following.

	LOADING	FREQUENCY MEAN	STD. DEV.
Find Financing	.4347	.55	1.32
Delivery	.4551	.55	1.41
Stocking	.6176	.77	1.70

FACTOR 8 - "TRAINING/RECRUITING" - Factor 8 had three activities which followed a logical pattern of recruiting and training. The first activity concerned "looking for new reps", followed by "training these reps", and then "travelling with the new trainees". These three activities loaded heavily ranging from .6686 to .7700. The apriori section also contained a training group but it consisted of six activities.

	LOADING	FREQUENCY MEAN	STD. DEV.
Look For New Sales Reps	.6686	0.58	1.33
Train New Sales Reps	.7700	1.33	1.94
Travel With Trainees	.7623	0.89	1.49

FACTOR 9 - "ATTENDING CONFERENCES/MEETINGS" - This factor primarily revolved around meetings or at conferences that salespeople either attend or work. Three of the variables had salespeople attending conferences while two activities were concerned with the salesperson working at clients conferences. This factor was similar to group 8 of the apriori conceptualization.

	LOADING	FREQUENCY MEAN	STD. DEV.
Attend Sales Conferences	.6957	2.10	1.92
Attend Regional Or District Sales Meets	.5989	2.32	1.99
Work Client Conferences	.5945	1.66	1.89
Set-Up Exibitions - Trade Shows	.4554	1.63	1.94
Attend Periodic Training Sessions	.3484	2.22	1.80
Review Companies New Products	.3432	3.53	2.37

FACTOR 10 - "HANDLING COMPANY MONEY MATTERS" - In this factor, salespeople are determining credit, price, submitting bids, or collecting on accounts receivable. These six activities revolve around the common dimension of money. Handling Price and Credit, Submitting bids, and Determining Price loaded the highest of the six variables in this factor.

This factor was almost identical to an apriori group entitled "Price and Credit."

	LOADING	FREQUENCY MEAN	STD. DEV.
Handle Pricing and Credit	.6845	2.85	2.75
Submit Bids	.5876	2.88	2.64
Contact Company Personnel to Determine Price	.3941	2.32	2.26
Collect Past Due Accounts	.4556	1.56	1.96
You Look Up Price	.5401	0.32	1.18
Look Up Bills	.4757	0.70	1.67

FACTOR 11 - "TRAVELLING OUT OF TOWN" - This factor was comprised of only two activities but both loaded very high. The apriori conceptualization had a group entitled "travel" but did not limit it to overnight or out of town travelling.

	LOADING	FREQUENCY MEAN	STD. DEV.
Spend Nights on Road	.8169	3.98	2.45
Travel Out of Town	.7794	5.02	2.28

FACTOR 12 - "POLITICKING" - This category had three variables, all of which were concerned with politicking or flattering within the company or with clients. Of all 121 activities, these were the only three that some salespeople considered offensive. On a number of the questionnaires there were comments written criticizing the use of these three activities as unprofessional. However, this group mirrored a group in the apriori section.

	LOADING	FREQUENCY MEAN	STD. DEV.
Politicking Within The Company	.7656	0.88	1.70
Politicking Outside Company	.7882	1.00	1.91
Flatter Clients	.4262	3.44	2.56

FACTOR 13 - "PREPARING FOR CALLS" - Factor 13 was composed of 5 activities, all of which are conducted prior to a sales call. The two highest loadings were "Researching Company Background" and "Studying trends in the Market". The apriori conceptualization had a group entitled "study" which contained four of these five activities.

	LOADING	FREQUENCY MEAN	STD. DEV.
Study Trends In Market	.6274	3.73	2.21
Study Clients Needs	.5693	4.32	2.15
Research Company Background	.6618	2.37	2.25
Forecast Demand	.4093	3.03	2.40
Show How Products Coordinate	.3266	3.72	2.50

FACTOR 14 - "TELEPHONING" - The factor "Telephoning" was comprised of four activities all of which contained the word "phone" in the activity. The loadings were relatively high, identical to the apriori section and consisted of the following:

	LOADING	FREQUENCY MEAN	STD. DEV.
Phone Follow-Up	.7591	4.72	2.25
Phone to Set-Up Appointments	.7361	5.13	2.09
Phone Office For Orders	.5038	4.88	2.50
Make Probing Phone Calls	.6605	3.35	2.48

FACTOR 15 - "WORKING WITH DISTRIBUTORS" - There were only two activities in this factor, both of which dealt directly with distributors, and again this factor was identical to the apriori.

	LOADING	FREQUENCY MEAN	STD. DEV.
Sell To Distributors	.8009	2.98	2.77
Establish Relations with Distributors	.7967	2.88	2.93

FACTOR 16 - "PROSPECTING" - Prospecting consisted of four activities, each of which was concerned with establishing new clientele. The salesperson begins with "searching out leads", then "identifying the person in authority", and finally "calling on the account."

This factor was different from any in the apriori section. The closest category was "calls" but Factor 16 has a different emphasis.

	LOADING	FREQUENCY MEAN	STD. DEV.
Call On Potential Accounts	.8013	4.51	2.07
Call On New Accounts	.7516	4.49	2.15
Search Out Leads	.6716	4.40	2.19
Identify Person In Authority	.4052	5.23	2.20

FACTOR 17 - "ATTENDING SEMINARS" - Factor 17 was comprised of a two-item set, and consisted of either giving speeches or providing speeches. There was no counterpart in the apriori conceptualization.

	LOADING	FREQUENCY MEAN	STD. DEV.
Provide Seminars and Speakers	.6529	1.33	1.79
Make Guest Speeches	.6289	0.68	1.29

FACTOR 18 - "COMMUNICATING" - The 18th factor was composed of two variables both concerned with mail, and both loaded relatively high. The apriori conceptualization had a four activity category entitled "use of mail."

	LOADING	FREQUENCY MEAN	STD. DEV.
Send Out Memos	.6199	3.39	2.46
Write Letters	.6677	3.70	2.25

FACTOR 19 - "WORKING FROM HOME" - This factor was comprised of two variables. "Working out of home" and "working after hours" both loaded positive, and above .30 . This possibly indicates that these salespople do not travel to the office but rather work from home.

	LOADING	FREQUENCY MEAN	STD. DEV.
Work Out Of Home	.5138	4.80	2.66
Work After Hours	.3391	5.00	2.00

FACTOR 20 - "WORKING FROM THE OFFICE" - The three variables that collectively form office work are all related because, typically, these activities would be performed in the salesperson's office. The closest category or group for the aprior section was "work format" which essentially consisted of the same activities. These office activities consist of the following:

	LOADING	FREQUENCY MEAN	STD. DEV.
Keep Office In Order	.7019	4.35	2.52
File	.7341	3.93	2.65
Keep Track of Invoices	.5750	3.29	2.92

FACTOR 21 - "EXAMINING THE SITE" - The composition of Factor 21 was comprised of three variables. Two of the variables dealt with examining the site of a product's installation, while the third activity was attending local sales meetings.

	LOADING	FREQUENCY MEAN	STD. DEV.
Examine Sites Prior To Installing	.6877	1.34	2.09
Take Clients On-Site	.3815	1.70	2.02
Attend Local Sales Meetings	.3471	2.17	

FACTOR 22 - "PLANNING" - Two planning activities appeared in this factor, and each had a high loading. Planning had four activities rather than two in the apriori.

	LOADING	FREQUENCY MEAN	STD. DEV.
Plan Daily Routine	.7436	5.80	1.67
Plan Selling Activities	.6862	5.45	1.86

FACTOR 23 - "WORKING WITH SUPPORT PEOPLE" - The two activities in Factor 23 were oriented toward working with support people, either in a supervisor/subordinate relationship or as a peer with no authority capability.

	LOADING	FREQUENCY MEAN	STD. DEV.
Give Orders To Support People	.7671	3.80	2.51
Coordinate Activities With Support People	.6597	3.37	2.48

FACTOR 24 - "WORKING WITH MANAGEMENT" - These three activities allow the salesperson to directly work with or aid management in some capacity, whether it be traveling with the supervisor or assisting in research.

	LOADING	FREQUENCY MEAN	STD. DEV.
Travel With Supervisor	.6261	1.87	1.57
Fill Out Questionnaires	.4412	1.51	1.69
Assist Management With Market Surveys	.3752	2.36	2.16

FACTOR 25 - "KEEPING CURRENT" - Factor 25 is composed of six variables, all of which center around feedback, reading literature, and

reviewing products. Keeping current was not contained in the apriori conceptualization but rather was a mixture of a couple of categories.

	LOADING	FREQUENCY MEAN	STD. DEV.
Provide Feedback To Superiors	.4579	4.90	2.00
Receive Feedback From Clients	.4963	4.80	2.04
Review Companies New Products	.3312	3.53	2.37
Read Company Literature	.5383	5.20	2.04
Read Trade Publications	.5971	4.41	2.28
Review and Monitor Competition Products	.5714	4.32	2.18

Formation of Salespeople Groups

The second major analytical step consisted of grouping salespeople based on their responses to the activities on the "frequency" scale. This step was accomplished through a clustering procedure. Using the basic SAS or other programmed computer packages presented a considerable problem in regards to the sample size. SAS was designed to accommodate only 250 observations when using the Cluster technique. However, the 1982 SAS update has a new procedure known as Fastclus which was capable of accommodating 100,000 observations (SAS, 1982). The Fastclus procedure also grouped or clustered observations; however, it provides different output than does the SAS Cluster. The Fastclus indentifies each respondent and into which cluster each belongs. It also provides a total summary of respondents on each cluster, in addition to distances between cluster leaders and various statistics. Fastclus does not provide a "mapping technique" as does Cluster. Therefore, the decision, with regard to choosing the number of clusters, relys on a new statistic called a "Cubic Clustering Criterion" (CCC).

The CCC is based on the Within-cluster Sum of Squares Criterion (WSS) that a cluster analysis uses. Fastclus attempts to minimize WSS, but has difficulty finding the global minimum unless the clusters are distinctly separated. The restriction of the CCC is that the number of observations must be very large (1393 respondents easily meets this requirement). The CCC then works on the assumption that there is a uniform distribution and that clusters are multi-dimensional and shaped like hypercubes.

The Fastclus procedure combines a method for finding initial clusters with a standard iterative algorithm for minimizing the sum of squared distances from the cluster means. The Fastclus algorithm was developed in part from Hartigans (1975) "leader" algorithm and MacQueen's (1967) K-means algorithm.

The Fastclus procedure institutes a technique known as "centroid sorting." The sorting technique begins by establishing a set of points known as cluster seeds. Each observation is assigned to a seed based on the means. The assignment may be temporary until the final process is completed and a best fit is established based on the means (Milligan, 1980).

The clustering is done on the basis of Euchlean distances computed from one or more numeric variables and operates in four basic steps as described in SAS User's Guide (1982):

1. Observations called cluster seeds are selected.

2. Optionally, temporary clusters are formed by assigning each observation to the cluster with the nearest seed. Each time an observation is assigned, the cluster seed is updated as the current mean of the cluster.

3. Optionally, clusters are formed by assigning each observation to the nearest seed. After all observations are assigned, the cluster seeds are replaced by the cluster means. This step is repeated until the changes in the cluster seeds became small or zero.

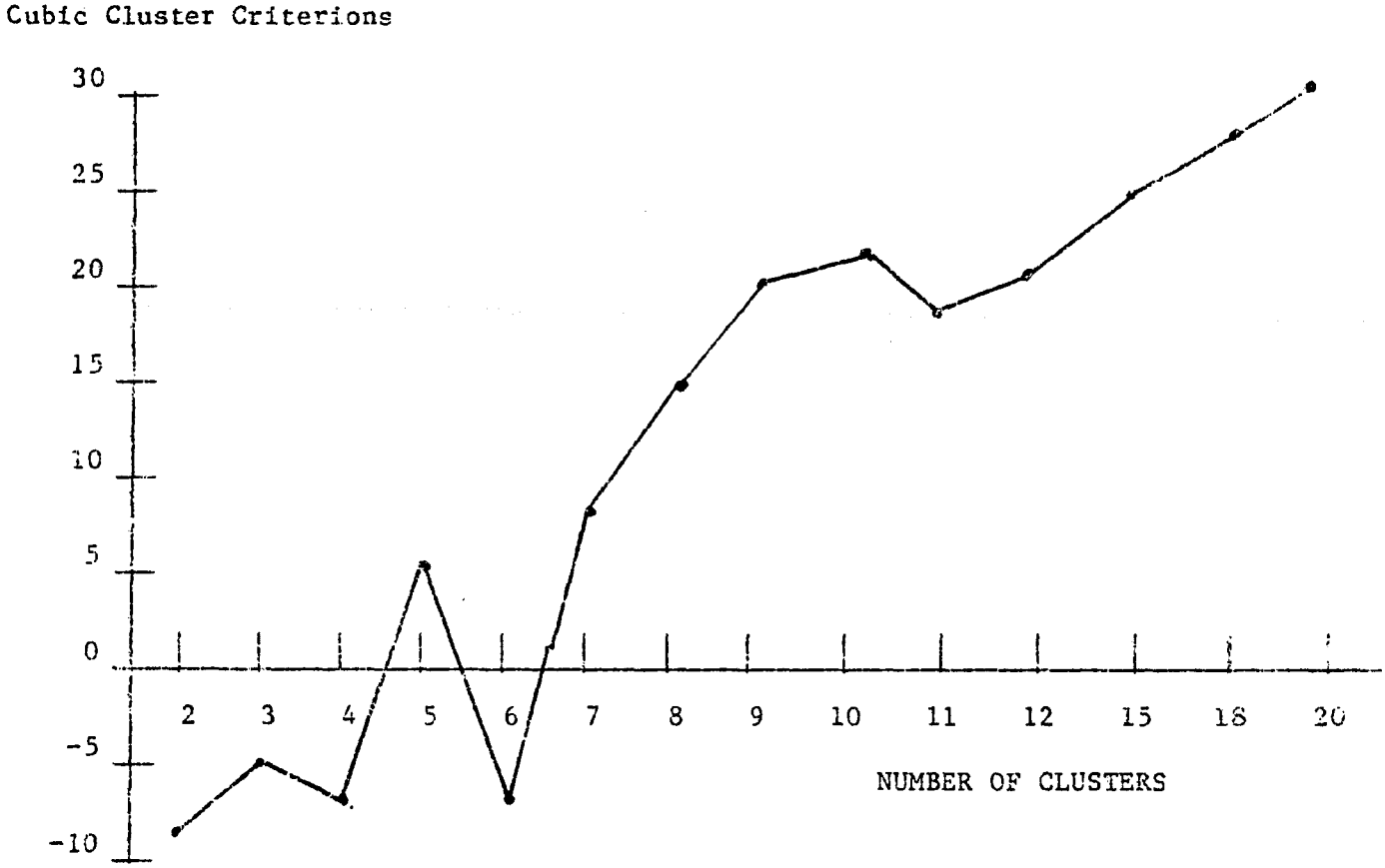
4. Final clusters are formed by assigning each observation to the nearest seed.

The first step in the Fastclus procedure was to identify and remove the outliers as suggested by the Fastclus manual. The Fastclus procedure identifies the outliers by respondent or questionnaire number, and clustering will not occur until the outliers are removed. The approximately 30 outliers were identified and removed from any further analysis. The outliers were examined in terms of their demographic profile to determine if any significant differences occurred. Upon examination of each of the demographic variables, there were no significant differences based on an alpha of .05.

VARIABLE	DEGREES OF FREEDOM	TAIL PROB.
Age	149	.243
Children	144	.544
Jobs	142	.143
Length of Time	141	.702
Length on Job	141	.777
Education	139	.454
Income	196	.066

The Fastclus procedure also requires that the specific number of cluster be specified for each run. Therefore, twenty-four unique cluster solutions were run ranging from a two cluster solution to a twenty-five cluster solution. The cluster solutions were developed on the factor scores of the respondents. As each of the twenty cluster solutions were completed, the CCC statistic was examined and plotted against the number of clusters (see Figure 1).

FIGURE 1
"PLOT OF CLUSTER SOLUTIONS - CCC STATISTIC
AGAINST NUMBER OF CLUSTERS - FREQUENCY"



Interpreting the CCC

The plots show two peaks, one representing a ten-cluster solution and the other representing a twenty-cluster solution. Any peak with a cluster solution greater than a 2 or 3 indicates a good clustering pattern (SAS Institute, 1982). Multiple peaks indicate potentially hierarchical data structure. If the CCC had been negative or around 0, the distribution would have been unimodal. In this case, there were three peaks, two of which had CCC scores that were very close. The last two peaks indicate a hierarchical pattern with the twenty-cluster indicating a very precise breakdown of subclusters. The first peak (5 clusters) was the first solution to show a non-unimodal clustering. However, the CCC scores were considerably lower than cluster solution 10 (CCC of 5 vs. CCC of 20). The third peak indicated a sharp rise as the number of cluster solutions approached the number of variables. In this case, there were 25 factors or variables and the CCC scores were continuing to rise. Very discrete data causes CCC to increase rapidly as the number of clusters increase. The ten cluster solution was the optimal solution because of a high CCC score and a definite peak before a continuing rise in CCC scores. The ten-cluster solution consists of the following:

Cluster	n
1	163
2	240
3	132
4	51
5	134
6	128
7	115
8	59
9	113
10	130

The largest cluster contains 227 respondents while the smallest cluster contains 51 respondents.

Merging of Sales Groups With Group Activities

The third major analytical section was designed to determine which factors were performed differentially by each of the clusters. A stepwise discriminant analysis was performed. Factor scores were the predictor variables and the individual ten cluster membership was the criterion variable. The stepwise procedure entered the 25 variables into the discriminant function one variable at a time based on their ability to discriminate. All 25 variables were significant at a .0001 level, but, of course, this can be partially explained by the large sample size. Table 15 lists the factors in order of discriminating power. The top three factors in terms of discrimination were (1) servicing the product, (2) stocking, and (3) servicing the account.

A second discriminant analysis was performed using simultaneous discriminant analysis with standardized betas (see Table 16). The respondents were split such that a holdout sample was created to validate the discriminant function. The discriminant function produced a hit ratio (the number of salespeople correctly classified by the discriminant function) of 95.32%. The holdout sample or validation sample produced a hit ratio of 91.15% as is shown in Table 17. The hit ratio scores were expected to be high since cluster analysis discriminates in the process of dividing groups, and the discriminant analysis should reflect the cluster's ability to group.

A test of significance was run using a chi square to determine if the hit ratio of the holdout sample was significantly different from chance. The chi square indicated that the hit ratio was significantly different from chance at a .01 level.

TABLE 15

"STEPWISE SELECTION - SUMMARY"

TABLE 16

"STANDARDIZED DISCRIMINANT FUNCTION COEFFICIENTS"

FUNCTION	FUNC 1	FUNC 2	FUNC 3	FUNC 4	FUNC 5	FUNC 6	FUNC 7	FUNC 8	FUNC 9
1	4.11	.553	.508	-.243	.032	.362	.116	.057	.045
2	.125	.033	-.237	-.337	.240	-.238	.298	.216	-.032
3	-.299	-.138	.834	.052	.102	-.414	.048	.131	-.273
4	.704	-.730	.151	.180	.107	-.110	-.037	.013	.102
5	.093	-.088	.078	-.210	-.120	-.277	-.265	-.004	-.046
6	-.513	-.411	.282	.110	-.100	.343	.273	-.270	.174
7	-.125	-.575	-.198	-.447	-.594	.124	-.260	-.003	-.148
8	-.172	-.025	.136	-.204	.241	-.151	-.316	-.515	-.111
9	.343	.220	.256	-.260	-.313	-.221	-.037	.117	.350
10	-.538	-.062	.306	-.154	-.398	-.136	-.051	.218	.424
11	.240	-.074	.182	-.414	-.187	.088	-.517	-.014	-.026
12	-.138	.134	.005	-.279	.311	-.183	-.501	-.494	.165
13	.047	-.041	-.167	-.260	-.018	-.210	.247	.099	.175
14	-.243	.008	-.046	-.415	.278	.135	.092	.150	-.095
15	-.100	-.222	.227	.006	.346	.538	-.424	.233	.171
16	-.162	.220	.110	-.285	-.115	.072	.148	.082	-.251
17	-.214	-.181	.015	.023	.263	.083	-.065	.282	-.318
18	-.078	-.145	-.086	.073	.218	.027	-.188	-.078	.280
19	.338	.235	.382	.084	-.328	.115	.004	-.212	.039
20	.212	-.004	.376	-.115	-.112	.282	-.154	.101	-.211
21	-.029	-.119	-.163	-.234	.315	-.118	-.249	.472	.273
22	-.006	-.313	.147	-.289	.101	.076	.397	-.265	.275
23	-.249	-.068	-.054	-.248	.155	-.146	.163	-.109	-.028
24	-.348	-.168	.017	.116	.097	.144	.310	.135	.213
25	.229	-.281	.046	-.496	.345	.123	.339	-.104	-.139

TABLE 15
"STANDARDIZED DISCRIMINANT FUNCTION COEFFICIENTS"

STEP	VARIABLE ENTERED	VARIABLE REMOVED	NUMBER IN	PARTIAL R**2	F STATISTIC	PROB > F	WILKS' LAMBDA	PROB > LAMBDA	AVERAGE SQUARED CANONICAL CORRELATION	PROB > ASCC
1	FACTOR4		1	0.5521	172.140	0.0001	0.44791906	0.0000	0.06134233	0.0000
2	FACTOR3		2	0.4675	122.502	0.0001	0.23853348	0.0000	0.11287477	0.0000
3	FACTOR7		3	0.4653	121.153	0.0001	0.12754003	0.0000	0.16351104	0.0000
4	FACTOR15		4	0.3230	66.489	0.0001	0.08633946	0.0000	0.19887167	0.0000
5	FACTOR1		5	0.3179	64.663	0.0001	0.05889297	0.0000	0.23024247	0.0000
6	FACTOR6		6	0.3032	60.530	0.0001	0.04103894	0.0000	0.25599258	0.0000
7	FACTOR10		7	0.3252	66.577	0.0001	0.02769447	0.0000	0.28605111	0.0000
8	FACTOR25		8	0.2458	45.262	0.0001	0.02088757	0.0000	0.30878933	0.0000
9	FACTOR12		9	0.2142	37.838	0.0001	0.01641266	0.0000	0.33162617	0.0000
10	FACTOR8		10	0.2212	39.350	0.0001	0.01278184	0.0000	0.35099588	0.0000
11	FACTOR5		11	0.1969	33.974	0.0001	0.01026491	0.0000	0.36846010	0.0000
12	FACTOR19		12	0.2092	34.879	0.0001	0.00819523	0.0000	0.38414536	0.0000
13	FACTOR22		13	0.1879	32.017	0.0001	0.00665820	0.0000	0.39896868	0.0000
14	FACTOR21		14	0.1782	29.562	0.0001	0.00547203	0.0000	0.41429829	0.0000
15	FACTOR2		15	0.1751	29.306	0.0001	0.00451410	0.0000	0.42817092	0.0000
16	FACTOR14		16	0.1625	26.768	0.0001	0.00378075	0.0000	0.43934838	0.0000
17	FACTOR20		17	0.1541	25.125	0.0001	0.00319803	0.0000	0.44966737	0.0000
18	FACTOR11		18	0.1516	24.615	0.0001	0.00271328	0.0000	0.45887435	0.0000
19	FACTOR24		19	0.1528	24.824	0.0001	0.00229877	0.0000	0.46868520	0.0000
20	FACTOR16		20	0.1431	19.311	0.0001	0.00201578	0.0000	0.47612042	0.0000
21	FACTOR17		21	0.1119	17.324	0.0001	0.00179014	0.0000	0.48316467	0.0000
22	FACTOR9		22	0.1055	16.552	0.0001	0.00159346	0.0000	0.49051363	0.0000
23	FACTOR13		23	0.0864	12.573	0.0001	0.00145585	0.0000	0.49635777	0.0000
24	FACTOR23		24	0.0783	11.652	0.0001	0.00134182	0.0000	0.50012776	0.0000
25	FACTOR13		25	0.0769	11.413	0.0001	0.00123864	0.0000	0.50478925	0.0000

TABLE 17

"RESULTS OF THE HIT RATIO PERFORMED BY THE SIMULTANEOUS DISCRIMINANT ANALYSIS - FREQUENCY"

	ANALYSIS SAMPLE			HOLDOUT SAMPLE		
Cluster Group	Number Of Cases	Number Correctly Classified	%	Number Of Cases	Number Correctly Classified	%
1	78	75	96.2	85	77	90.6
2	103	103	100.0	137	132	96.4
3	75	74	98.7	57	52	91.2
4	21	19	90.5	30	24	77.4
5	66	64	97.0	68	64	94.1
6	55	53	96.4	73	67	91.8
7	61	53	86.9	54	46	86.8
8	31	28	90.3	28	23	82.1
9	50	45	90.0	63	52	82.5
10	50	56	96.6	72	71	98.1
TOTAL CORRECTLY CLASSIFIED			95.3			91.2

At this point, the activities have been factored together based on a pattern of frequency. In addition, the salespeople have been clustered together based on their factor scores. The discriminant analysis has identified which factors were the most important in developing a discriminant function. The next step was to identify which factors were significantly different from each other when examining each of the ten clusters.

An ANOVA and Duncan's multiple range test become the second technique in this section. The ANOVA was run to determine if the variables were significantly different. Once again all factor scores were significant at a .05 level.

A Duncan's multiple range test was then conducted to examine where the differences in clusters occurred. More specifically, the Duncans procedure would indicate which factors comprised each of the individual clusters. The Duncan's multiple range test uses a protection level of alpha for the collection of tests, rather than an alpha level for the individual test. Also, unlike the Student Newman-Keuls test, Duncan's is appropriate when the cell sizes are unequal (Winer, 1971; Kirk, 1968). The Duncan's is somewhat more liberal than is Scheffe's which allows more differentiation among the clusters. Fewer significant differences are obtained using Tukey's or Scheffe's test of significance. It was important to differentiate among activities that comprised the clusters, in order to adequately describe each cluster (Winer 1971). Table 18 is a complete summary of the Duncan's results. The interpretation of Table 18 may be explained as follows: clusters 1-10 are found horizontally across the top of the table; the numbers in parenthesis are the number of respondents; vertically to the left is the factor

number and the factor title. The letter "H" indicates that the factor was significantly different from other factors on that particular cluster. Additionally, the "H" indicates that the individual factor was an important variable in the composition of that cluster and had a high factor score mean.

On the other hand, an "L" was significantly different but the mean had a negative sign. Thus, the factor was less frequently performed than it was in other clusters. An "M" indicates significant difference with the factor being performed significantly more often than most other clusters.

TABLE 18

"RESULTS OF DUNCAN'S MULTIPLE RANGE TEST"

	1		2		3		4		5		6		7		8		9		10	
Selling Function	M	.46		-.55	M	.52	M	.41		.15	H	.85	L	-.85		.09		-.26		-.35
Entertaining		-.12	H-M	.41	H-M	.57		.10		-.20		-.42		-.38	H-M	.39		-.06		-.37
Servicing Prod.	M	.24		-.38	L	-.60	H+	1.78		-.24		-.51		-.13	H+	1.77		-.44	H	.51
Servicing Acct.		-.74		-.51	H	.69		-.47	H+	1.22		-.70		-.16	M	.31		-.46	H+	1.14
Handling Orders		-.02		-.26		.37		.09		-.47		-.08		.05		.57		.22		.13
Miscellaneous		.11		.21	L	-1.22		.19		.20		.15	L	-.55		-.14		.09	H	.76
Delivery		.07		.17		.13	L	-1.50	L	-1.06		-.20		.02		-.25		.22	H	1.40
Training/Recr.		-.14		-.33		-.24	H	.50		-.20		-.11		-.12		.15	H	1.14		.12
Conf./Meetings		-.27		-.24	M	.46		-.40		.24	M	.66		-.22	H	.93		-.18		-.10
Handling Co. Money Matters		.07		.18	L	-.77	L	-.72		-.50		.45		.00	H	1.28		-.22		.23
Out of Town Travelling		.10		-.17		.44		-.23		-.18		.25	L	-.61		.10		.02		.30
Politiking		-.17		-.36		-.09		-.19		-.10		.00		-.00	H	.40	H	1.29		-.27
Preparing For Calls		-.29		.28		.21		-.09		-.21		.04		-.22		.20		-.12		-.05
Phoning		.41		.23		.07		.01		-.19		-.31		-.56		.08		.38		-.29
Working With Distributors	H	1.06		-.36		-.43	L	-1.13	H	.69		-.41		-.17		.07		.13		.01
Prospecting		.34		.12		-.01		.42		-.55		.08		-.33		.01		-.13		.04
Attending Seminars		.38		.08		-.19		.20		-.03	L	-.62		.04		-.20		-.07		.03
Communicating		-.02		-.06		-.23	L	-.56	M-H	.30		-.01		-.07	H-M	.41	M-H	.34		-.11
Working From Home		.06		-.40		.14		.41		.04	H	.88		-.43		-.12		-.24		.17
Working From Office		.50		-.41		.20		-.20		-.00		.21		-.25		-.01		-.25		.27
Working On-Site		.17		.11		.28		-.81		.02		-.60		-.04	H	.76		.28		-.47
Planning	L	-.31		.27		-.01		.03		.15		.11	L	-.96		.14		.19		.35
Working With Support People		-.11		.19		-.12		.32		-.18		-.12		-.19		-.02		.40		-.12
Work w/Mgmt.		.05		.43		-.58		.13		.22		-.09		-.36		.23		-.14		-.08
Keeping Current		-.08		.17		.45		.45		.19		-.37	L	-1.22		-.24		.25		.21

H = High and positive significant factor score mean - indicates that the factor is performed more frequently than other clusters.
M = Low but positive significant factor score mean - indicates that the factor is performed more frequently than average.
L = Negative significant factor score mean - indicates that the factor is performed less frequently than other clusters.

TABLE 19

"COMPARISON OF CLUSTER DEMOGRAPHICS - 'FREQUENCY"

	CLUSTER 1	CLUSTER 2	CLUSTER 3	CLUSTER 4	CLUSTER 5	CLUSTER 6	CLUSTER 7	CLUSTER 8	CLUSTER 9	CLUSTER 10	OVERALL
SEX**											
o Male	98.0%	98.7%	97.0%	98.0%	92.5%	89.8%	91.9%	98.3%	99.0%	96.8%	96.1%
o Female	2.0%	1.3%	3.0%	2.0%	7.5%	10.2%	8.1%	1.7%	1.0%	3.2%	3.9%
RACE*											
o White	100.0%	99.0%	97.0%	100.0%	97.0%	97.6%	97.3%	100.0%	100.0%	95.3%	98.0%
o Black	0.0%	1.0%	0.0%	3.0%	2.4%	2.7%		0.0%	0.0%	4.7%	2.0%
MARITAL											
o Married	82.0%	85.0%	84.0%	76.0%	84.0%	78.9%	84.7%	88.0%	85.8%	88.0%	83.7%
o Other	18.0%	15.0%	16.0%	24.0%	16.0%	21.1%	15.3%	12.0%	14.2%	12.0%	16.3%
AGE**	39.9	43.2	44.0	36.4	40.0	38.0	42.3	42.5	40.1	42.0	41.2
PREVIOUS JOBS**	1.86	1.3	1.5	1.8	2.1	1.6	1.7	1.9	1.9	2.0	1.7
TIME WITH** COMPANY (YRS)	7.4	10.6	14.9	5.1	7.6	6.3	10.2	8.3	7.5	8.9	9.1
TIME WITH** PRESENT SALES JOB (YRS)	5.8	8.1	13.5	4.9	7.3	6.1	8.2	7.3	6.3	8.0	7.7
EDUCATION** (YRS)	15.0	15.4	15.3	15.9	14.9	15.8	15.1	14.7	15.4	14.0	15.1
INCOME**	$31,700	$32,700	$68,000	$45,300	$36,800	$42,700	$36,100	$35,100	$43,300	$34,800	$39,900

* Significant at .05 level.
** Significant at .01 level.

An example of the interpretation of Table 18 would be the following: Factor 3 (Servicing the Product) becomes highly significant in the composition of activities of clusters 4 (factor score mean of 1.78), 8 (1.77), and 10 (.51). From this point, it may be deduced that servicing the product is an activity that is more frequently performed by cluster groups 4, 8, and 10. The Duncan's multiple range test indicates that servicing the product is significantly different in a positive direction from all other clusters. Servicing the product is also significantly different in a negative direction on Cluster 3, indicating less frequency of performance of this activity. All other clusters are not significantly different from each other, indicating a close similarity of frequency of performance. The factor score means indicate the amount of difference and the direction.

At this point, the next important step became the examination of the ANOVA-Duncan results to determine which factors were important to each cluster, and further to identify and label each cluster. Crosstabs were run for a number of demographics against the clusters (see Table 19). The crosstabs included Cluster group by sex, race, marital status, children, company and SIC group. In all cases the chi-square was significant at .05 level or better. In addition, a breakdown procedure was run using age, number of previous jobs, length of time with company, length of time as salesman with company, educational level and income. The breakdown procedure provides a mean for each of the previous variables for each of the 10 clusters along with the overall industry mean. The significance for each of these means was tested by analysis of variance and in each case, the variable was significant at a .05 level or less. However, it is acknowledged that this level of significance is largely a function of sample size.

Examination of the Individual Clusters

Each cluster will be examined and described based on three aspects. The first part of the discussion will be the description of primary factor activities. A second aspect will be a breakdown of the demographics of the cluster. The last aspect of the discussion will examine SIC's and companies that have the highest percentage representation. This section will identify the SIC numbers and the name of the industry. Also included will be the percent of the cluster represented by that industry (% cluster). For example, if industry 30 has 47 people in cluster 1 and the cluster has 163 people, then the "% cluster" score would be 28.8% (47 ÷ 163). It can then be stated that industry 30 comprised 28.8% of cluster 1. A 10% criterion will be used as a cutoff in the inclusion of companies in the % cluster, % industry section of the discussion of clusters. A second percentage may be stated as the percentage of the industry in that cluster (% industry). Again examining industry 30, an example can be provided. Industry 30 has 101 sales representatives, 69 of which are in cluster 1. The second percentage provided then becomes 69 cluster 1 salespeople divided by 101 industry salespeople for a percentage of 69% (69 ÷ 101 - 69%). It can then be stated that industry 30 is heavily represented in cluster 1.

Cluster 1 - "Technical Sellers-Distributor" (n=163)

The first cluster consists of salespeople who work consistently with distributors (factor mean score of 1.06). They tend to perform the selling function by going through the basic steps in the selling process. In cluster

one salespeople also have to service a product that may be somewhat technical in nature. In order to service the product they perform maintenance (if necessary), supervise installations, train the customers, order parts, etc.

Cluster 1 salespeople, frequently engage in office work (keep invoices, file, etc.), and use the phone more frequently than other clusters in their daily business. Prospecting and providing seminars are also activities in which the salesperson engages. The salesperson does not tend to make plans, service accounts (inventory, help in advertising, help customers plan, etc.), conferences, or do much training or recruiting of other salespeople. The following is a list of SIC groups that heavily comprised Cluster 1.

SIC	DESCRIPTION	# REPS	% INDUSTRY	% CLUSTER
30	Rubber and Plastics	69	69%	42%
34	Metal Products	21	13%	16%
35	Machinery	23	14%	10%

The cluster 1 salesperson was male (98%), white (100%), married (82%) and 40 years of age. He had been with the company 7.4 years and had 15 years of formal education with a salary of $31,700. Table 19 (page 114) compares and contrasts all 10 clusters and the study average of each of the demographic variables.

Cluster 2 - "Missionary" (n=240)

The second group of salespeople are heavy entertainers. They also work directly with management on activities such as research studies and filling out questionnaires. In addition these salespeople perform trend analyses and examine clients' needs. Other activities performed at a lesser level are phoning, planning activities, and a number of miscellaneous activities.

The Cluster 2 salepeople do not really perform the selling function, or do they service either accounts or the product. They do little or no training nor politicking. They do not work from their home but neither do they perform office chores (filing, invoices, etc.).

The following is a list of companies or SIC groups that heavily comprised Cluster 2.

SIC	DESCRIPTION	# REPS	% INDUSTRY	% CLUSTER
32	Stone, Clay and Concrete	51	21%	61%
33	Primary Metal	30	13%	58%
34	Metal Products	52	22%	39%
35	Machinery	51	21%	23%
36	Electrical Equipment	37	15%	26%

The demographics of Cluster 2 indicated similarity to Cluster 1. The salesperson in Cluster 2 was also male (99%), white (99%) and 43 years of age. The Cluster 2 salesperson had been with the company 10.6 years, and had 15.4 years of formal education. The income was $32,700, which was $1000 more than cluster 1. Cluster 2's previous jobs held was 1.3; the lowest of any of the clusters.

These salespeople were not hardcore sellers but instead concentrated on studying the market and their clients' needs. They did not do any selling per

se. They would seem to take product orders from the clients but order taking was not a primary activity since it neither appears in the positive activities nor the negative activities. This person would appear to be a "missionary" type of salesperson yet still be capable of taking orders.

Cluster 3 - "Account Sellers" (n=132)

Cluster 3 performs the traditional selling function by making a sales pitch. This is the first cluster thus far that frequently services customer accounts (Inventory, point of purchase, credit, etc.). These salespeople also entertain the client with lunch, drinks, etc. They work or attend conferences, do a lot of out of town travel, take orders, and try to stay current.

The Cluster 3 salesperson less frequently services the product, engage in pricing and credit, nor work with management or distributors. There were only four companies that showed any consistency in falling within cluster 3. All of these companies were oriented toward clothing.

SIC	DESCRIPTION	# REPS	% INDUSTRY	% CLUSTER
23	Apparel	10	13%	13%
31	Leather (Shoes)	118	89%	85%

The salespeople were almost entirely male (97%), even thought all four companies sell ultimately to a woman's market. Again, the typical salesperson was white (97%), married (84%), and with at least 1 child (87.7%). The average age was 43.2 and thus higher than any other cluster group. This group also has been with the company longer than any other cluster group (14.9 years). Perhaps the most surprising statistic was the average income of $68,000 dollars which was far higher ($23,000 higher) than any other group.

Cluster 3 is the closest example of the classic order taker. These people perform the selling function, service accounts, travel, work conferences, and take orders.

Cluster 4 - "Technical Sellers-Manufacturers" (n=51)

The fourth cluster was comprised of people that frequently service the product and perform the selling function. These salespeople also train and recruit other salespeople and prospect for new clientele. Keeping current seems to also be an important group of activities.

The salespeople typically do not deliver and stock, nor do they work with distributors. this type of salesperson has price and credit terms predetermined for them. Cluster 4 also does very little or no work through the mail.

The companies that belong to this cluster are almost exclusively in SIC 384 which are surgical, medical and dental instruments and supplies. Cluster 4 was comprised from one company, a subsidiary, and a third smaller company. (all in SIC 384 accounting for 86% of the cluster).

The typical salesperson in Cluster 4 is different in many respects from the previous three clusters. Although still primarily male (98%) and white (100%), the salesperson on the average is the youngest of any cluster (36.4). He has been with the company only 5 years which is again the lowest of any cluster. On the other had, he is the most educated with an average of 15.9 years. The Cluster 4 salesperson has the second highest average income ($45,300).

The "specialized technical salesperson" has to be a little more educated in order to deal with a complex area (medicine). The salesperson must keep current and service the product yet still perform a selling function.

Cluster 5 - "Trade Sellers" (n=134)

Cluster 5 works with distributors as did Cluster 1. However, the fifth cluster services the account rather than servicing the product. These salespeople will mail to aid their sales endeavors. They also do a lot of miscellaneous work such as the distribution of flyers, the filling out of sales activities and checking prices.

These salepeople perform shelf stocking less frequently than other clusters. They also do less prospecting, servicing of products, or entertaining of clients. They also do not tend to concentrate on aspects of the order, (Factor 5). Furthermore, the Cluster 5 salesperson submit bids, and handle credit.

Cluster 5 was primarily comprised of the following companies:

SIC	DESCRIPTION	# REPS	% INDUSTRY	% CLUSTER
23	Apparel	27	20%	22%
37	Transportation	58	43%	63%
39	Miscellaneous Mfg.	33	25%	80%

Cluster 5 had more women than most of the other clusters. Of 134 salespeople, 10 were women. Even though this only amounts 7.5%, it was 21% of all women represented in the study. There were also 4 Blacks in Cluster 5 that account for 3% of the Cluster 5 population. The average salesperson for Cluster 5 was married (84%), 40 years of age, had been with the company 7.6 years, and had 14.9 years of education. This salesperson had an average of 2.1 previous jobs, which was higher than any other cluster.

The salespeople in Cluster 5 typically sold to wholesalers or other middlemen. They service the account by taking inventory, give point of purchase advertising, help the clients plan, and write up orders.

Cluster 6 - "Trade Show and Conference Sellers" (n=128)

The salespeople in Cluster 6 have a tendency to work from their homes and perform the selling function. They also attend and work conferences and meetings, handle company money matters, travel, and perform "office work" (such as keeping track of invoices).

The negative aspect of this job is perhaps the most revealing. The Cluster 6 salespeople infrequently service the accounts or products, nor do they do much entertaining. They also do little or no stocking of shelves and do very little work with distributors. There were seven companies that primarly comprised Cluster 6 and these companies fell into two SIC categories.

SIC	DESCRIPTION	# REPS	% INDUSTRY	% CLUSTER
23	Apparel	61	48%	50%
27	Printing	29	23%	78%

This cluster had 22 companies represented primarily from the clothing, publishing, rubber, and leather industries. The blast furnance industry seemed to be somewhat out of character except that three SIC 331 companies had 2 to 3 salespeople in this category, although only accounting for 20% of SIC 331.

There were 13 women (10.2%) in the Cluster 6 salesforce, which was the best percentage of any of the clusters. The average age of the salesperson was 38, while the average educational level was 15.8 years, with an income of $42,700.

Cluster 7 - "Industrial Norms" (n=115)

Cluster 7 was perhaps the most difficult to interpret. The salespeople did not have a high mean on any factor and the highest mean was on "orders". However, there were a number of significant factors at a negative level. These sales rep less frequently keep up with trends, plan, or indulge in the basic selling function. In addition, they do little travel, very little entertaining, and yet work out of the office. Essentially, with the exception of the above negative activities, these salespeople perform a number of activities in average amounts of frequency.

Upon examination of the companies within this cluster, another interesting phenomenon was observed. Thirty-six companies had at least one salesperson in this cluster but none had a high or medium percentage of their sales forces in this category. There were also 30 SIC groups represented, but none had a high percentage of salespeople.

The average salesperson was male (91.9), white (97.3), married (84.7) and 42.3 years of age. The salespeople were average in regards to the industry-wide education (15.1) and averaged $36,100 in income. The average time with the company was 10.2 years which was slightly higher than the overall average.

Basically, this group is non-descript. They perform several activities but none are prominant. The highest average was for orders and stocking shelves. They are represented industry-wide and are about average in most of the demographic characteristics.

Cluster 8 - "Technical Servicers" (n=59)

Cluster 8 had eight factors that had a positive significant mean, according to the Duncan's multiple range test, more than any other cluster. These salespeople serviced the product, which included activities such as testing equipment, performing maintenance, supervising installation, and training customers. They also handled company money matters which might include submitting bids, looking up price, collecting past due accounts, and handling credit. The cluster 8 salesperson also did work on site, such as examining the site prior to installation. Conferences and meetings were also important to the salesperson as well as performing some politicking activities. the salesperson used the mail, entertained clientele and took orders. Although primarily interested in servicing the product, these salespeople also serviced accounts to a lesser degree.

There were no activities that were significantly in the negative. However; delivery and stocking activities, providing seminars, and miscellaneous activities were all negative.

There were 20 companies represented in Cluster 8. The four major SIC groups represented included:

SIC	DESCRIPTION	# REPS	% INDUSTRY	% CLUSTER
30	Rubber Products	6	10%	6%
34	Fab. Metal	14	24%	10%
35	Machinery	10	17%	5%
36	Electrical Equipment	10	17%	7%

All of the above companies produce equipment that could be considered to be technical in nature. The salespeople were 98.3% male and 100% white.

They had been with the company 8.3 years, were 42.5 years of age, had an education of 14.7 years, and an income of $35,100.

These salespeople worked with technical products and serviced these products. They handled the money aspects such as submitting bids, and were often on site or attending conferences. These salespeople were not opposed to politicking or entertaining.

Cluster 9 - "Boundary Spanners" (n=113)

The salespeople of Cluster 9 had the highest mean on the factor "politicking". They also performed training-recruiting activities such as looking for new recruits and training them. These salespeople also frequently used the mail and phone, and had a lot of contact with support people. The Cluster 9 salesperson handled orders and provided delivery.

Like Cluster 8, the Cluster 9 salesperson did not have any factors that were significant in a negative direction. However, servicing the account, servicing the product, and selling function had negative means.

There were 32 companies represented in Cluster 9, but the vast majority had a machinery or metal products orientation.

SIC	DESCRIPTION	# REPS	% INDUSTRY	% CLUSTER
34	Fab. Metal	16	14%	12%
35	Machinery	53	47%	24%

The salespeople were exclusively white and male (99%). They were 40.1 years of age with 15.4 years of education and an income of $43,300.

The Cluster 9 salesperson worked the closest with support people. They were on site frequently, maintained a training-recruiting program, and did a

lot of politicking. They took orders, and apparently relied heavily on mail and the phone.

Cluster 10 - "Servicers" (n=130)

The last cluster can be characterized as people who deliver and stock the product. These salespeople also service the account and perform miscellaneous activities such as distributing flyers and filling out expense accounts and sales activity reports. To a lesser extent these salespeople service their products as well as the accounts. In this regard, the Cluster 10 person is opposite the Cluster 9 salesperson who primarily serviced the product and to a lesser degree serviced the account. This salesperson travels to some degree, does some office work, and attempts to keep current on information.

The Cluster 10 salesperson does not engage in much entertaining nor perform as heavily in the selling function. Of the 130 people in Cluster 10, 126 of them belonged to the following two SIC groups:

SIC	DESCRIPTION	# REPS	% INDUSTRY	% CLUSTER
35	Machinery	63	48%	29%
36	Electrical Equipment	54	42%	39%

These three companies make well known products that are sold through retail dealers. Thus their job is to make sure the product is delivered and to service the account with promotion, credit and planning. To a lesser extent they also must maintain the products, all of which would possibly need maintenance and instruction.

The Cluster 10 salesperson was primarily male (96.8%) and white (95.3%). However, there were 5 Blacks in Cluster 10, which was more than

any of the other clusters. Most of these salespeople were family oriented with 88% married and 93% with children.

The percentage with children was somewhat unusual because it was considerably higher than the other clusters. The closest cluster to Cluster 10 in regard to children was Cluster 5 with 83.5% having children. The educational level of this cluster was the lowest with 14 years of education, and the average income ($34,800) was also well below the industry norm (39,900).

DISCUSSION AND CONCLUSIONS OF FREQUENCY SCALE

The taxonomy based on the frequency scale contained 10 classifications. Each of the classifications or categories of the taxonomy was examined in terms of activities and demographics. This section will examine the developed taxonomy and compare and contrast it to both the Newton and McMurray classifications.

The first step in the examination of the classification is a brief summary of the taxonomy as follows:

Cluster 1 - "TECHNICAL SELLERS - DISTRIBUTOR" - This category is characterized by salespeople who service a technical product. These salespeople are "selling" oriented, and prospecting is important. Lastly, these salespeople are selling to distributors or middlemen.

Cluster 2 - "MISSIONARY" - This category's main function is entertaining. The support sales rep also assists management with market studies and research. They examine trends and attempt to determine the needs of clients. However, these salespeople are not "sellers" or order takers.

Cluster 3 - "ACCOUNT SELLERS" - The sales rep is primarily concerned with selling and taking orders, but they also service the accounts with promotion. These sales reps do a lot of travel, entertaining and working conferences. This category was characterized by a shoe salesperson.

Cluster 4 - "TECHNICAL SELLERS-MANUFACTURERS" - This category is very similar to Cluster 1, with two primary exceptions. First, this group does not deal with distributors but rather the ultimate consumer. Secondly, the salesperson sold specialized products such as dental and medical instruments.

Cluster 5 - "TRADE SELLERS" - This sales rep will service their accounts and sell primarily to wholesalers or retailers. However, they do very little prospecting. The beer salesman would be a typical example of the non-technical-distributor seller.

Cluster 6 - "TRADE SHOW AND CONFERENCE SELLERS" - The Trade Show seller's main function is selling. They work from their home, travel, and work conferences. They also handle a lot of company money matters. A typical representative of this group would be a book representative.

Cluster 7 - "INDUSTRY NORMS" - This is perhaps the most interesting group in that they are non-descript. Ony two factors had positive means and their means were very low (order taking and stocking). The vast majority of the companies had a representative in this group. The demographic profile was very average in terms of the industry norm. This group may be very important in that they do not fit any category. All previous studies have forced salespeople into a "meaningful" category. This group may very well indicate that some salespeople do not fit existing patterns.

Cluster 8 - "TECHNICAL SERVICERS" - This is the third category concerned with a technical salesperson. This group differs in that they go "on site". They service the product and to a lesser degree, service the account. Pricing is a frequently performed function including the submission of bids.

Cluster 9 - "BOUNDARY SPANNERS" - This group differs from the others in that politicking is their primary activity, both within the company and with customers. They work closely with support people, do some training, and communicate through mailand phone.

Cluster 10 - "SERVICERS" - This category services the account, and to a lesser degree, they service the product. They travel, handle company money matters, and do a lot of planning.

Table 20 provides a comparison of the Newton, McMurray and current disseration taxonomy. McMurray was the first to attempt a classification in 1961. Using his own intuition and experience, Newton reduced the seven categories to four and began to examine sales variables based on these four categories.

The McMurray classification contains two categories that are not applicable to industrial sales, and as such Newton did not include them in his classification. An "inside-order taker" is a retail salesperson who works

behind a counter. The "service salesperson" is someone who does not sell a tangible product such as insurance.

TABLE 20

A PRESENTATION OF THE THREE SALES CLASSIFICATIONS"

McMurray (1961)	Newton (1973)	Moncrief
1. Delivery	1. Trade	1. Technical Sellers - Distributors
*2. Inside-Order Taker	2. Missionary	2. Missionary
3. Order Taker	3. New Business	3. Account Sellers
4. Missionary	4. Technical	4. Technical Sellers - Manufacturers
5. Technical		5. Non-Technical Sellers - Distributors
6. Create Demand for Product		6. Trade Show and Conference Sellers
*7. Service Salesman		7. Industry Norms
		8. Technical Services
		9. Boundary Spanners
		10. Servicers

*Not applicable to this dissertation study.

TABLE 21

"A COMPARISON OF THE THREE SALES CLASSIFICATIONS"

CATEGORY	SERVICE ACCOUNT	SERVICE PRODUCT (TECHNICAL)	DISTRIBUTORS	SELL	OTHER	RESPONDENTS
MONCRIEF						
1. Technical Sellers Distributors	- -	+	+ +			163
2. Missionary	- -	- -	*	- -	Provide Information	240
3. Account Sellers	+ +	-	-	+		132
4. Technical Sellers - Manufacturers	- -	+ +	- -	+		51
5. Trade Sellers	+ +	-	+ +	+		134
6. Trade Show-Conference Sellers	-	-	-	+ +	Conferences	128
7. Industry Norms	*	*	*	*		115
8. Technical Services	+	+ +	*	*		59
9. Boundary Spanners	- -	- -	*	- -	Politick	113
10. Servicers	+ +	+	*	-		130

TABLE 21 (CONTINUED)

"A COMPARISON OF THE THREE SALES CLASSIFICATIONS"

CATEGORY	SERVICE ACCOUNT	SERVICE PRODUCT (TECHNICAL)	DISTRIBUTORS	SELL	OTHER	RESPONDENTS
NEWTON						
1. Trade	+ +	- -	+ +	+		396
2. Missionary	-	-	*	-	Provide Information	353
3. New Business	-	-	*	+ +		128
4. Technical	-	+ +	*	*		283
McMURRAY						
1. Delivery	+	- -	-	-	Deliver	130
2. Order Taker	+	- -	+			199
3. Missionary	- -	- -	*	- -	Provide Information	353
4. Technical	-	+ +	*	*		283
5. Create Demand	-	- -	-	+ +		195

* Factor Was Nonsignificant
+ + Heavy Positive Emphasis On Factor Or Activity
- - Heavy Negative Emphasis On Factor Or Activity
+ Positive Emphasis On Factor Or Activity
- Negative Emphasis On Factor Or Activity

Comparison and Contrast of Classification

The classification system of this dissertation revolved around four primary factors. The first primary factor was "servicing the account". This factor is comprised of conducting inventory, stocking shelves, providing promotional assistance and filling out purchase orders. The second factor was "servicing the product", which indicates that the product is technical. The third factor was working with and selling to distributors. The last important factor was "selling". This factor was comprised of the basic steps in making a sales call, such as preparing a sales presentation, selecting products to take on call, performing pre-approach activities, making the presentation, attempting closure and overcoming objections. Because of these four factors, classification names and descriptions were somewhat different from Newton and McMurray in many regards, but there were also many similarities. Table 21 compares each classification system based on the previously mentioned four factors (service the product, service the account, selling, distributors).

Table 21 indicates the four factors across the top along with an "other" category to indicate an important activity not included in the list of four. The three scales are shown vertically to the left beginning with the Moncrief scale, followed by Newton and then McMurray. The last column indicates the number of respondents in the case of the Moncrief scale and the number of estimated or hypothesized respondents in the Newton and McMurray scales. Based on the difinitions provided by Newton and McMurray of their individual scales, respondents of the dissertation study were placed into the best corresponding class of both the Newton and McMurray scale. This allowed

some comparison as to size and percentage of categories. Because of these four factors, classification names and descriptions were somewhat different from Newton and McMurray in many regards, but there were also many similarities. The following discussion will point out similarities and differences in the three classification systems. References to McMurray will be labled as "Mc", Newton as "N" and Moncrief as "M".

(1) Missionary Salespeople (Mc, N, M)

A missionary salesperson has been defined as an individual whose primary responsibility is to increase business from presently identifiable customers and potential customers by providing product information. These individuals do not take orders from customers but persuade them to buy from the wholesaler or retailer (Churchill, Ford and Walker, 1979 p. 7). All three classifications include a missionary salesperson. The "N" and "Mc" classifications are in total agreement as to the definition of missionary salespeople. The "M" missionary salesperson adds some activities, including entertaining, close work with management and support people. The "M" missionary salesperson also does some prospecting for new people. Basically, the three classifications agree with the concept of missionary salespeople.

(2) Technical Salespeople (Mc, N and M)

The "Mc" and "N" classifications have a single category for technical sales and yet technical sales can be very diverse. The "M"

classification incorporated three technical categories. The first technical category was technical servicers. These individuals are not selling per se but rather are more concerned with servicing the product (maintenance, training) and servicing the account. The technical servicers frequently go on site to handle problems and aid the client. The second and third technical categories are very similar to each other with one primary difference. The difference revolves around the customer either being a middleman or an ultimate consumer (manufacturer or institution). Both technical categories are selling oriented with prospecting being an important activity.

(3) New Business Selling (Mc and N)

The third category established a category of sales rep who is constantly looking for new clients. McMurray referred to this category as creating demand for a product and used a vaccuum cleaner salesperson as an example. The "M" classification does not include a new business category.

(4) Order Taker (Mc) vs. Account Sellers (M)

The "Mc" classification includes an order taker whose primary responsibility is to go in the field and take orders. The Account Sellers "M" have as a primary activity selling and order-taking. However, the Account Seller services his account, an activity which McMurray does not mention. Newton does not have a classification that fits this category.

(5) Trade Selling (N, M)

The trade seller is attempting to increase sales from present customers which are typically wholesalers and retailers. Both "N" and "M" classifications agree with the concept of trade sellers.

(6) Delivery (Mc)

The delivery salesperson has been identified as a sales rep who delivers the product such as a milkman. Newton makes no reference to a delivery type person while this present dissertation also does not include a separate category for delivering, but rather incorporates the delivery activity into other classes or categories.

(7) Trade Show and Conference Sellers (M)

The trade show seller attends trade shows and conferences and sells to the people attending. The job involves a lot of travel and the handling of the company's money matters.

(8) Industry Norms (M)

The norms have no activities that causes them to stand out. The representatives are almost identical to the demographic averages of the study. Also, almost all companies represented in the study had at least one representative in this category. This group would appear to be salespeople that do not fit any other category, and as such become an

important group. This group has not been hypothesized by either one of the two previous classifications.

(9) Servicers (M)

The servicers were not sellers per se, but they did take some orders. The main function of this group was to service the account regardless of whether it was a technical or non-technical product. Also this group's customers could be institutional, manufacturing or distributors. Table 21 indicates that neither Newton nor McMurray have a category matching the servicer's category.

(10) Boundary Spanners (M)

The boundary spanner's main activity is politicking. They politic within the company and outside the company. The sales rep will take orders but they are not sellers nor do they service the account or product. These reps work closely with support people and management and play a critical role in identifying and interpreting environmental change.

Table 21 indicates the number of respondents in each category. As previously mentioned, the number of respondents in the Moncrief classification has been determined by a cluster analysis procedure and received a 95.3% correct classification as performed by a simultaneous discriminant analysis. The respondents for the Newton and McMurray classifications were compiled by examination of classification definitions and compared to the

dissertation results. The 115 people classified into the "M" "industry norm" category were left out of the "Mc" and "N" classes because of a lack of fit.

Newton - Newton's first category trade sellers received 396 respondents which is considerably larger than the "M's" trade sellers (134). The Newton trade seller would probably include the "M's" servicers, which aren't selling oriented but do service the account with promotional help and information. Newton's trade sellers also would include the account sellers. The ony real difference in trade sellers and account servicers is the customer level. Trade sellers typically work with retailers, wholesalers while account sellers are working primarily with other manufacturers or institutions.

Newton's Missionary category combined the missionary and boundary spanners from the "M" classification. Boundary spanners do not sell nor service accounts but rather politic at all aspects of the selling process. This politicking could feasibly meet the requirements of the Newton-McMurray missionary salesperson.

The new business sales rep would incorporate the trade show-conference sellers. This is the only "M" category that is strictly sellers and has very little service orientation.

The fourth category, Technical, would incorporate the three "M" technical categories and thus include 283 reps.

One fault of the Newton schema is the lack of a category for manufacturing-institutional selling. The trade seller is defined as wholesaler-retailer oriented. As such there was a large group of people that would be forced into the trade category that had no where else to be categorized.

McMurray - The first "Mc" category, Delivery, has no direct comparison category, but the category would probably contain 130 people from the

servicers group since they do perform delivery and stocking activities. The "Mc" delivery category, however, is somewhat limiting in activities performed.

The missionary and technical categories would be the same as they were in the Newton discussion.

The order taker would include the account sellers even though by definition they are somewhat different. The account sellers are very concerned with service and somewhat with order-taking, whereas the order taker priority is opposite that of the account seller. The order taker would also include about half of the "M" trade sellers who are neither pure order takers nor creaters of demand. The trade seller will take some orders and some new business selling, but they too are service oriented.

The last category is demand creaters. This category consists of 195 people, including all of the trade show-conference sellers and the other half of the "M" trade sellers.

In summary, two categories were virtually the same in all three studies. McMurray had one other category that agreed with a category of this research, while Newton also had one. However, this dissertation research uncovered some important differences including: a breakdown of the technical salesperson, an industry norm category, a boundary spanner, a servicer's category and a trade show-conference seller.

TIME SCALE

The "time" scale asked respondents to determine, on an average, how long it takes to complete the activity in question. The time was measured in intervals of 15 minutes up to 3 hours. After 3 hours, the respondents were to specify the time frame. The mean and standard deviation can be found in Table 22.

The factor analysis contained 1208 observations but omitted 199 respondents due to missing data. The analysis of the "time" scale was conducted in almost identical fashion as was the "frequency" scale, therefore much of the justification has already been presented. In order to avoid being repetitive, justification for each step has been withheld if identical to the step carried forth in the "frequency" scale section.

The "time" scale was much more difficult to interpret than was the frequency scale because the factors were not as clear nor as easily understood. One possible reason for this difference could be due to the thought required to fill out the time scale. It is relatively easy to fill in a 1 to 7 frequency scale but it apparently took much more thought to indicate how much time has involved in conducting each of the 121 activities, as such, many people were very careful while others may not have taken the needed time and thought process.

TABLE 32

"MEANS AND STANDARD DEVIATION"

	ROUTINE	SELLACT	SPLAN	HEPLAN	SEARCH	CALLEX	CALLPO	CALLNEW	IDAUT	VERIFY
MEAN	0.69	0.87	0.30	1.01	1.93	3.74	1.82	1.56	1.12	0.30
STD DEV	0.77	0.86	2.22	3.05	4.21	5.77	6.78	5.49	4.26	0.60
	SPRES	DISPL	SELECT	MAKEPRE	CONDUCT	AID	PREDICT	CLOSURE	OVER	SELLD
MEAN	1.15	0.60	0.63	1.90	0.93	0.87	0.93	1.01	1.19	1.08
STD DEV	2.00	0.94	2.52	4.05	1.60	2.08	2.13	1.42	3.79	2.39
	SELLC	FIND	EXPD	HAND	REPART	ORDAC	WRITE	FOLLOW	SAMPLE	SITES
MEAN	1.05	0.56	0.69	0.35	0.20	0.28	1.01	0.71	0.30	0.33
STD DEV	2.69	0.72	1.20	0.59	0.08	0.63	1.03	0.78	0.60	0.73
	INSTAL	TEST	BE	TECHINF	LEARN	BACKGR	MAINT	TRENDS	NEEDS	MODIFY
MEAN	0.39	0.51	0.30	0.93	0.07	0.50	0.22	0.71	0.80	0.91
STD DEV	2.13	1.82	0.68	2.26	2.30	2.10	0.70	0.78	0.91	0.81
	SHOW	INTRO	CREDIT	BIDS	LOOKP	CONTACT	YOU	FIGURE	FINDD	PASTDUE
MEAN	0.71	1.13	0.52	0.72	0.98	0.38	0.06	0.17	0.17	0.39
STD DEV	0.99	3.05	2.21	1.29	2.37	0.55	0.00	2.05	1.02	0.91
	SHIP	TAILOR	DELIV	STOCK	PROTR	INVEN	FORCST	NUREP	TRAINU	ATTRN
MEAN	0.59	0.08	0.18	0.26	0.46	0.76	0.79	0.29	1.65	4.22
STD DEV	2.09	0.67	0.50	0.96	1.21	2.79	1.27	2.39	6.66	9.00
	USING	TRAINC	TEACH	PROFESD	RECFEED	SURVEY	PROVINF	LSM	RSM	SCONF
MEAN	5.51	0.59	0.14	0.55	0.83	0.93	0.62	0.86	4.77	5.58
STD DEV	2.39	1.05	0.46	1.00	0.98	2.88	0.80	2.67	8.32	10.77
	CLCONF	SEMINAR	SPEECH	REVIEW	COLIT	TRADE	MONITOR	FOACT	FOEXP	FORO
MEAN	3.12	0.65	0.29	1.03	0.89	0.74	0.73	1.20	0.79	0.99
STD DEV	7.31	2.00	0.69	2.57	2.12	0.73	0.98	3.77	2.29	2.14
	FOCR	QAIRE	LUNCH	PARTY	GOLF	DRINK	EAT	ONSITE	AFTHR	HOME
MEAN	0.31	0.51	1.11	0.43	1.19	0.73	1.33	0.82	1.85	3.60
STD DEV	0.97	0.69	0.96	1.14	2.03	0.82	2.30	2.01	3.36	10.11
	NIGHT	SETUP	XMAS	MEMO	LETTER	OFFICE	TRAVOUT	TRAVIN	SUPER	TRAVTR
MEAN	6.87	0.17	0.82	0.52	0.78	1.02	5.89	3.13	3.97	2.17
STD DEV	13.56	0.49	1.27	0.69	0.76	3.91	11.71	7.97	6.90	7.38
	LOAD	GIVE	COORD	CHECKDI	KEEP	FILE	INVOICE	PRF	BSMI	BSWO
MEAN	0.58	0.63	3.73	0.83	0.83	0.61	0.56	1.59	0.16	0.26
STD DEV	2.97	0.96	2.93	2.18	2.99	0.81	2.13	6.75	0.96	2.09
	FLATTER	DOR	FLYER	SHOWS	AD	PHORD	PHMIN	PHAP	PHEUC	PROBE
MEAN	0.39	0.36	0.77	1.81	0.25	0.71	0.28	0.79	0.29	0.29
STD DEV	2.57	2.10	2.79	3.46	0.77	2.32	1.02	0.91	0.81	0.71
	LOYAL									
MEAN	0.18									
STD DEV	0.67									

*All times are represented in hours. For Example - 1.5 = One Hour and a Half.

Grouping Related Activities

As in the "frequency" scale section, a factor analysis procedure was chosen. Also the principal axis with a principal component was again chosen because of its reproducible results. The varimax rotation produced 121 factors as presented in Table 23. Using an eigenvalue of one as the cut off point, 36 factors were extracted accounting for 66.3% of the variance.

The factor loadings were then examined using $\pm$ .30 as a minimum level in the preliminary examinations. Any variable which did not have a $\pm$ .30 was disregarded in terms of further analysis. Alpha's were run to determine the reliability of the factors. Of the 36 factors, 11 did not have an alpha of at least .50 even after eliminating those variables that had low loadings (See Table 24).

A second factor analysis was run on the remaining 89 activities. Thirty-two of the original 121 activities were deleted because of low loadings or because their assigned factor did not have an alpha of .50. This scale, unlike the frequency scale, had many activities loading on more than one factor.

The second factor analysis produced 89 factors, but only 25 had an eigenvalue of one or greater. However, 68% of the variance was explained.

As in the frequency section, the following is a brief description of each of the factors, the factor loading scores, and the means of the activities.

TABLE 23

"FACTOR EIGENVALUES AND VARIANCE"

	1	2	3	4	5	6	7	8
PORTION	12.38	6.69	4.96	4.15	3.39	3.31	2.71	2.64
PORTION	0.10	0.05	0.04	0.03	0.02	0.02	0.02	0.02
CUM PORTION	0.10	0.15	0.19	0.23	0.26	0.28	0.31	0.33
	9	10	11	12	13	14	15	16
EIGENVALUES	2.33	2.13	2.08	1.92	1.81	1.71	1.65	1.59
PORTION	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
CUM PORTION	0.35	0.37	0.38	0.40	0.41	0.43	0.44	0.45
	17	18	19	20	21	22	23	24
EIGENVALUES	1.56	1.49	1.44	1.42	1.40	1.36	1.35	1.29
PORTION	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
CUM PORTION	0.47	0.48	0.49	0.50	0.51	0.53	0.54	0.55
	25	26	27	28	29	30	31	32
EIGENVALUES	1.26	1.23	1.18	1.15	1.12	1.11	1.10	1.08
PORTION	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
CUM PORTION	0.56	0.57	0.58	0.59	0.60	0.61	0.62	0.62
	33	34	35	36				
EIGENVALUES	1.05	1.03	1.01	1.00				
PORTION	0.00	0.00	0.00	0.00				
CUM PORTION	0.63	0.64	0.65	0.66				

TABLE 24

ALPHA SCORES ON ORIGINAL FACTORS - "TIME"

	Alphas	Items	Variables
FACTOR 1	.8687	3	118-120
FACTOR 2	.9170	10	13-14, 34-35, 42, 74-75, 78-80
FACTOR 3	.8199	9	7-8, 16, 19, 36, 103, 108, 110-111
FACTOR 4	.6793	5	69-71, 66, 60
FACTOR 5	.7925	9	25-26, 30, 33, 37, 47, 62-63, 121
FACTOR 6	.8104	7	5-9, 11, 14
FACTOR 7	.5565	4	26-27, 18, 112
FACTOR 8	.6948	4	45, 51, 66, 114
FACTOR 9	.7807	4	87, 59, 103, 105
FACTOR 10	.6540	4	22-24, 28
FACTOR 11	.8669	3	31, 54, 57
FACTOR 12	.5300	3	84-86
FACTOR 13	.7141	4	5, 9, 17, 23
*FACTOR 14	.2058	2	92, 89
FACTOR 15	.7358	2	1-2
*FACTOR 16	.3308	3	99, 59, 50
*FACTOR 17	.3764	2	55, 20
FACTOR 18	.5511	3	117, 106, 104
FACTOR 19	.5628	3	93-95
FACTOR 20	.3290	2	15, 32
FACTOR 21	.4907	3	72, 78, 19
FACTOR 22	.5676	5	4, 7, 105, 107, 108
*FACTOR 23	.2597	3	68, 98, 114
FACTOR 24	.8199	11	38-39, 41, 52, 64-65, 67, 27-29, 40
FACTOR 25	**	1	21
*FACTOR 26	.3173	2	76-77
FACTOR 27	.6852	4	97-99, 91
*FACTOR 28	.3898	2	52-53
*FACTOR 29	.3477	3	114, 100, 61
*FACTOR 30	.2139	3	116, 90, 104
*FACTOR 31	.1230	2	121, 101
*FACTOR 32	.2153	2	58, 49
FACTOR 33	.5117	4	43-44, 46, 83
*FACTOR 34	.4050	2	109, 65
*FACTOR 35	.1327	2	48, 73
*FACTOR 36	.4034	4	115, 81-82, 27

*Denotes factors that were eliminated because of low Alpha's.
**No alpha score for only one variable.

Description of Factors

FACTOR 1 - "MEETING NEEDS OF CUSTOMER AND CLIENTS" - This factor contained ten activities that revolve around the needs of clients and establishment of a communication system. The first step was examining the trends in the market place, the second was look to the needs of the client, the third was modify the product, and the last was show how the product coordinates with the clients product line. A second group of activities was concerned with following up the order, ordering samples, and then tailoring the needs to meet client's needs. The last three activities were based on feedback from the client or to the company and other salespeople. This factor did not have a corresponding category in the A priori scheme nor in the frequency scale.

	LOADING	TIME MEAN	STD. DEV.
Study Trends in Market Place	.6814	.71	.78
Study Clients' Needs	.6881	.80	.92
Modify The Product to Fit Clients' Needs	.3978	.51	.82
Show How Product Coordinates With Existing Line	.4977	.71	.95
Tailor Deliveries to Meet Clients' Needs	.4473	.49	.68
Order Samples	.4699	.30	.60
Follow-Up Clients Order	.4072	.71	.79
Receive Feedback From Client	.6180	.83	.99
Provide Feedback to Management	.6627	.85	1.00
Provide Information to Other Salespeople	.5536	.62	.80

FACTOR 2 - "PRESENTING THE PRODUCT" - This second factor appeared to be a series of steps involved in selling the company's products. The steps followed a somewhat logical approach. The first step was selecting which

product to take on the call, make the presentation, and provide technical information. Meanwhile the salesperson learns about the product by watching the technician. The salesperson also reviews companies, new products, and in turn introduces them to clients. His last step was filling in the paper work.

This second factor also did not have a corresponding group in the A priori nor in the frequency scale. This factor combined some technique activities with study activities and report activities.

	LOADING	TIME MEAN	STD. DEV.
Select Which Products To Take On Call	.8282	.63	2.52
Make Presentation To Clients	.5580	1.90	4.00
Provide Technical Information To Clients	.9023	.95	2.20
Learn About Product By Watching Technician	.8867	.48	.30
Introduce New Products To Clients	.7306	1.14	3.05
Review Companies New Products	.8245	1.03	2.57
Read Company Literature	.9537	.89	2.12
Fill Out Activities Reports	.5792	1.24	3.77
Fill Out Expense Account	.8930	.74	2.29
Fill Out Purchase Orders	.9332	.44	2.14

FACTOR 3 - "ESTABLISHING RELATIONSHIPS WITH CLIENTS" - This factor was comprised of six variables and also follows a series of steps. The first step was using an aid in presentation and then overcoming objections. The salesperson possibly used flattery and politics to overcome the objection, while maintaining company public relations with the clientele. The third factor also did not have a similar category in the A priori and frequency scales.

	LOADING	TIME MEAN	STD. DEV.
Use An Aid In Presentation	.8549	.87	2.48
Overcome Objections	.6195	1.19	3.80
Coordinate Activities With Support People	.6657	.73	2.95
Do Company Public Relation Work	.3962	1.60	6.75
Politick With Clients	.9414	.27	2.09
Flatter Clients	.7750	.60	2.98

FACTOR 4 - "MEETINGS AND CONFERENCES" - This factor had 5 activities all concerned with meetings, conferences, or training sessions. Factor 4 was very similar to Factor 9 in the frequency scale. Meetings and conferences was almost identical to the A priori scheme and frequency scale.

	LOADING	TIME MEAN	STD. DEV.
Attend Training Sessions	.5778	4.22	9.00
Attend Regional Sales Meetings	.6718	4.77	8.32
Attend Sales Conferences	.7351	5.58	10.77
Work Client Conferences	.7045	3.12	7.31
Travel With Supervisor	.4635	3.47	6.90

FACTOR 5 - "MAKING SALES CALLS" - The fifth factor contains seven steps that follow a logical sequence. The first step was to search out leads for a sales call, identify the person in authority, prepare the sales presentation, call on the account, and make the sales presentation. Factor 5 was very similar to the "Calls" group in the A priori section.

	LOADING	TIME MEAN	STD. DEV.
Search Out Leads	.5952	1.31	4.21
Identify The Person In Authority	.5973	1.12	4.27
Call On Existing Accounts	.6710	3.75	5.77
Call On Potential Account	.6239	1.82	4.78
Call On New Accounts	.6667	1.57	3.49
Prepare Sales Presentations	.7964	1.15	2.40
Make Sales Presentation	.6128	1.90	4.06

FACTOR 6 - "TELEPHONING" - This factor was almost identical to Factor 14 in the frequency scale and also to a group in the A priori conceptualization. Four variables comprise this factor, all of which have the word "phone" in the activity phrase.

	LOADING	TIME MEAN	STD. DEV.
Phone For Maintenance	.5566	.29	1.03
Phone For Appointments	.7646	.75	.91
Phone To Follow-up Calls	.8082	.90	.82
Make Probing Phone Calls	.6801	.53	.72

FACTOR 7 - "PRICING AND SHIPPING" - Factor 7 contained two variables which were difficult to label, but loaded quite high. The two items are the following:

	LOADING	TIME MEAN	STD. DEV.
Look Up Price In Catalogues	.9208	.60	2.17
Handle Shipment Problems	.9409	.59	2.10

FACTOR 8 - "PROVIDING CLOSURE" - There were four activities that comprised "closure". These four activities were all directly or indirectly

associated with closing a sale. This category is in effect one of the steps in selling and as such is only a part of the first group in the A priori section.

	LOADING	TIME MEAN	STD. DEV.
Obtain Closure of a Sale	.3926	1.01	1.42
Order Accessories	.5872	.28	.63
Place Point of Purchase Displays	.7779	.34	2.11
Write Up Orders		1.02	1.43

FACTOR 9 - "MISCELLANEOUS 1" - This factor was also difficult to interpret. Factor 9 contained three activities and consisted of the following:

	LOADING	TIME MEAN	STD. DEV.
Coordinate Activities With Support People	.6939	.73	2.95
Keep Office In Order	.7037	.83	2.99
Take Clients To Dinner	.9159	1.33	2.30

FACTOR 10 - "PROSPECTING AND CLOSING" - This factor was comprised of four activities beginning with "searching out leads"; followed by "identifying the person in authority", "predicting closure", and lastly "expediting the order". This factor, like Factor 8, was also a step in the selling process and partially comprised group 1 of the A priori.

	LOADING	TIME MEAN	STD. DEV.
Search Out Leads	.5703	1.31	4.21
Identify The Person In Authority	.5920	1.12	4.27
Predict A Closure Date	.8960	.44	2.14
Expedite Order	.8055	.65	1.21

FACTOR 11 - "PREPARING THE APPROACH" - Four activities comprised Factor 11. This was another factor that was difficult to label. The activities are generally performed prior to a sales call. There was no corresponding category in the A priori. The four activities are the following:

	LOADING	TIME MEAN	STD. DEV.
Determine Legalities	.4718	.20	.47
Examine Sites Prior To Installation	.4348	.34	.73
Order Samples	.3462	.30	.60
Determine Price of Products	.6530	.60	2.17

FACTOR 12 - "TRAVELLING" - Factor 12 was comprised of four activities that were all directly concerned with traveling. The primary emphasis was on over night travel. Travelling was very similar to the A priori scheme, more so than the corresponding category in the frequency scale.

	LOADING	TIME MEAN	STD. DEV.
Spend Nights On Road	.7792	6.87	13.56
Travel In Town	.5884	3.14	7.97
Travel Out of Town	.8214	5.90	11.71
Travel With Supervisors	.3927	3.47	6.90

FACTOR 13 - "EQUIPPING CLIENTS" - The 13th factor begins with "forecasting demand". The other two activities (Installing and Stocking) in effect equip two different types of clients. This category was not represented in the A priori section.

	LOADING	TIME MEAN	STD. DEV.
Supervise Installation of Equipment	.8248	.40	2.14
Stock Shelves	.7103	.27	.96
Forecast Demand	.7016	.74	1.27

FACTOR 14 - "HANDLING ORDERS" - Five activities comprised "orders" as Factor 14. This factor was almost identical to Factor 5 in the frequency scale. The factor was primarily concerned with problems encountered in the ordering process.

	LOADING	TIME MEAN	STD. DEV.
Find Lost Orders	.7966	.18	1.02
Expedite Orders	.3800	.65	1.20
Handle Back Orders	.7488	.35	.59
Follow-up Orders	.5274	.71	.79
Taylor Deliveries	.3850	.49	.68

FACTOR 15 - "WORKING IN OFFICE" - Office work was composed of only two variables. The first variable was "keeping office in order" and the second was "keeping track of invoices". The A priori scheme and the frequency scale had a similar category.

	LOADING	TIME MEAN	STD. DEV.
Keep Office In order	.6486	.83	2.99
Keep Track of Invoices	.8756	.54	2.13

FACTOR 16 - "ENTERTAINING" - Entertaining was another factor that had a simular counterpart in the "frequency" factors, although the frequency scale

and the A priori contained five activities. Entertaining consisted of the following three activities:

	LOADING	TIME MEAN	STD. DEV.
Throw Party For Clients	.7031	.43	1.14
Take Clients Out For Leisure Time (golf, etc.)	.7355	1.20	2.04
Take Clients Out For a Drink	.6417	.73	.83

FACTOR 17 - "PLANNING" - This was the first factor that was exactly like a factor in the "frequency" section. The two variables were both oriented to planning and were similar to the A priori scheme.

	LOADING	TIME MEAN	STD. DEV.
Plan Daily Routine	.7840	.70	.77
Plan Selling Activities	.8048	.88	.86

FACTOR 18 - "COORDINATING THE PRODUCTS" - The 18th factor contained four activities. These four activities were also difficult to label. These salespeople modified the product to meet customers needs, and then demonstrated how the product coordinated with their existing line. The other two activities were "working after hours" and "set up appointments through the mail". This category did not have a counterpart in the A priori conceptualization.

	LOADING	TIME MEAN	STD.
... Products To Meet Customers Needs	.3032	.51	.82
Show How Products Coordinate With Existing Line	.3371	.71	.95
Work After Hours	.7386	1.85	3.30
Set-up Appointments Through The Mail	.6831	.18	.45

FACTOR 19 - "MISCELLANEOUS 2" - Factor 19 had the lowest alpha's of any existing factor. These three activities are difficult to interpret and consist of the following:

	LOADING	TIME MEAN	STD. DEV.
Overcome Objections	.4089	1.19	3.80
Provide Seminars and Guest Speeches	.7929	.84	2.01
Fill Out Activity Reports	.5553	1.24	3.77

FACTOR 20 - "COMMUNICATING" - Communicating consists of three activities, all directly related to writing. The first activitiy is sending Christmas cards or other items through the mail. The second item is writing memos and the third is writing letters. This factor was similar to a corresponding category in the A priori scheme and frequency scale.

	LOADING	TIME MEAN	STD. DEV.
Send Christmas Cards	.5375	.82	1.27
Send Memos	.6916	.63	.69
Send Letters	.6329	.79	.77

FACTOR 21 - "SELLING TO ULTIMATE CONSUMERS" - Factor 21 contains only one activity, "selling to the ultimate consumer". Selling to consumers was the only activity that loaded above .3 on Factor 21.

	LOADING	TIME MEAN	STD. DEV.
Sell To Ultimate Consumers	.7766	1.09	2.68

FACTOR 22 - "PRICING" - Two items comprise "pricing". The first item is "submitting bids" while the second is "contacting company personnel for the price". The activities and their loadings are as follows:

	LOADING	TIME MEAN	STD. DEV.
Submitting Bids	.6653	.73	1.29
Contacting Company Personnel for Price	.5568	.38	.56

FACTOR 23 - "TRAVELLING TO OFFICE" - This factor was the second to have only one activity. No other activity had a factor loading higher than a .3.

	LOADING	TIME MEAN	STD. DEV.
Travel To Office	.7043	1.03	3.31

FACTOR 24 - "SERVICING TECHNICAL PRODUCTS" - Factor 24 had six activities and was very similar to Factor 3 of the frequency section. these salespeople order repair parts and accessories. They also are present during repairs and provide maintenance. Lastly, they train customers concerning the use of product and teach safety instructions.

	LOADING	TIME MEAN	STD. DEV.
Order Repair Parts	.6024	.20	.48
Order Accessories	.3600	.28	.63
Be Present During Repairs	.6994	.31	.68
Provide Maintenance	.6485	.23	.70
Train Customers How To Use Product	.5788	.60	1.05
Teach Safety Instructions	.5932	.15	.47

FACTOR 25 - "HELPING CLIENTS PLAN" - The last factor was also a single item factor. Help clients plan had a factor loading of .7273.

	LOADING	TIME MEAN	STD. DEV.
Help Clients Plan	.7273	1.01	3.05

Formation of Salespeople Groups

The second major analytical step was the composition of salespeople into groups based on the factor scores of the time scale. This grouping procedure was again accomplished through a clustering process. Specifically, the SAS Fastclus procedure was utilized as it was in the "frequency scale". The first step was the removal of outliers. In the frequency scale there were only 30 outliers, out of 1300 respondents, but the time scale contained 82 outliers. The large increase of outliers was attributed to the apparent difficulty with the scale. As in the frequency section, the outliers were examined for any significant differences in the demograhic profile of the respondents. Only one variable proved to be significant at a .05 level. The number of previous jobs held question indicated that the outlier had a mean of 2.09 while the

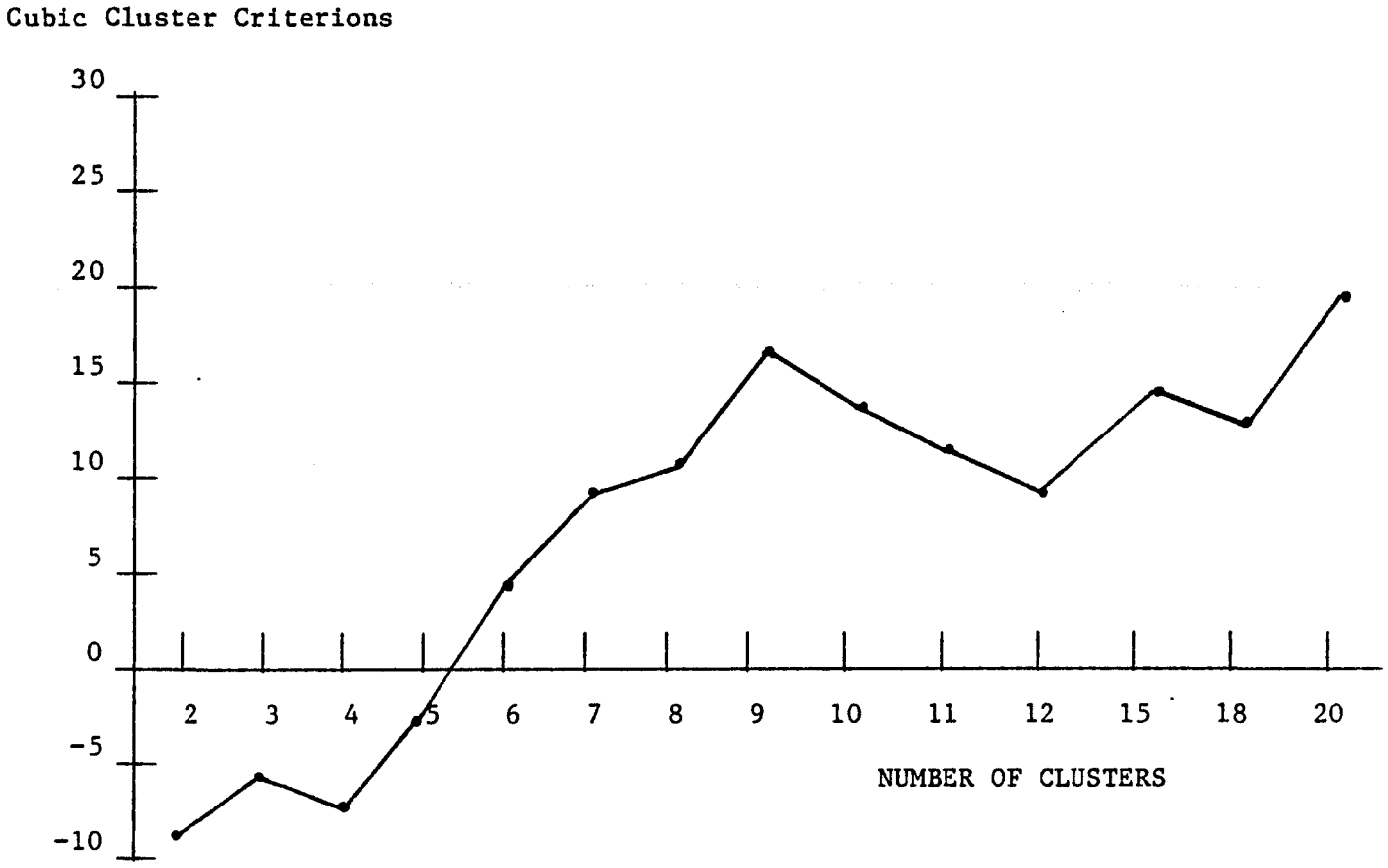
study group had a mean of 1.71 for a .004 significance level. However, there were no significant differences on any other variable.

VARIABLE	DEGREES OF FREEDOM	TAIL PROB.
Age	225	566
Children	214	515
Jobs	206	007
Length of Time	218	158
Length on Job	216	217
Education	207	912
Income	187	982

A number of cluster solutions were specified, ranging from a two-cluster solution to a twenty-five cluster solution. The CCC statistic was examined and plotted against the number of clusters (See Figure 2). The figure indicates a peak at the nine cluster solution which consisted of the following:

Clusters	n
1	533
2	125
3	182
4	129
5	9
6	66
7	58
8	6
9	115

FIGURE 2
"PLOT OF CLUSTER SOLUTIONS - CCC STATISTIC
AGAINST NUMBER OF CLUSTERS - TIME"



Merging of Activity Groups With Sales Groups

The third analytical step became the merger of group activities with the salespeople clusters. The first merger technique was the use of a stepwise descriminant analysis. The factor scores were used as the predictor variables and the ten clusters became the criterion variables. Using a stepwise procedure, the 25 factors were entered into the equation one at a time. All of the factors were significant at a .05 level. The top eight factors in terms of discrimination power included the following:

1. FACTOR 12 - Travel
2. FACTOR 16 - Entertaining
3. FACTOR 4 - Meetings/Conferences
4. FACTOR 1 - Meeting The Needs of Clients
5. FACTOR 24 - Technical Products
6. FACTOR 23 - Travel To Office
7. FACTOR 14 - Orders
8. FACTOR 17 - Planning

A complete list of the stepwise variables can be found in Table 25, while the standardized discriminant weights may be found in Table 26. As in the frequency scale section, a second discriminant analysis function was run in order to examine the capability and accuracy of the clustering procedures. A holdout sample was created and hit ratios were determined. The analysis sample correctly classified 93.0% and the holdout sample correctly classified 89.6%. A chi square analysis was performed to determine if the correct classification was significantly different from chance. As in the frequency scale, the holdout sample was significantly different from chance at a .05 level.

As in the frequency scale section, a second discriminant analysis function was run in order to examine the capability and accuracy of the clustering procedures. The overall hit ratio or percent of correctly classified salespeople was 90.75, which was 4% less than the frequency scale. Table 27 provides a summary of the predicted versus actual membership classification.

The second step in this section was the use of analysis of variance and Duncan's Post Hoc. As in the frequency scale, an ANOVA was run to aid in the determination of which variables were significantly different. The Duncan's specified where these differences occurred Table 28 provides a summary of the mean scores of each factor by cluster. As can be seen, the factor score means typically are not as high as they were in the "Frequency Scale". The following pages examine each of the individual clusters in the "time scale" series.

TABLE 25

"STANDARDIZED DISCRIMINANT FUNCTION COEFFICIENTS"

STEP	VARIABLE ENTERED	VARIABLE REMOVED	NUMBER IN	PARTIAL R**2	F STATISTIC	PROB > F	WILKS' LAMBDA	PROB > LAMBDA	CANONICAL CORRELATION	PROB > ASCC
1	FACTOR12		1	0.5353	174.658	0.0001	0.46470355	0.0000	0.06691206	0.0000
2	FACTOR16		2	0.4990	150.907	0.0001	0.23280762	0.0000	0.12928942	0.0000
3	FACTOR4		3	0.4764	137.722	0.0001	0.12190127	0.0000	0.18832152	0.0000
4	FACTOR1		4	0.4471	122.313	0.0001	0.06735777	0.0000	0.24406086	0.0000
5	FACTOR24		5	0.4188	108.510	0.0001	0.03916966	0.0000	0.29606570	0.0000
6	FACTOR23		6	0.3931	97.792	0.0001	0.02377334	0.0000	0.34214855	0.0000
7	FACTOR14		7	0.3834	93.756	0.0001	0.01465970	0.0000	0.38959096	0.0000
8	FACTOR17		8	0.3490	80.232	0.0001	0.00954282	0.0000	0.42969109	0.0000
9	FACTOR20		9	0.1374	23.985	0.0001	0.00823197	0.0000	0.43932118	0.0000
10	FACTOR22		10	0.1060	17.836	0.0001	0.00735974	0.0000	0.44744454	0.0000
11	FACTOR6		11	0.0719	11.646	0.0001	0.00683072	0.0000	0.45278901	0.0000
12	FACTOR21		12	0.0605	9.674	0.0001	0.00641753	0.0000	0.45801165	0.0000
13	FACTOR25		13	0.0504	7.960	0.0001	0.00609440	0.0000	0.46139403	0.0000
14	FACTOR11		14	0.0548	8.701	0.0001	0.00576026	0.0000	0.46563034	0.0000
15	FACTOR19		15	0.0351	5.462	0.0001	0.00555808	0.0000	0.46827538	0.0000
16	FACTOR13		16	0.0321	4.963	0.0001	0.00537980	0.0000	0.47029849	0.0000
17	FACTOR2		17	0.0240	3.675	0.0003	0.00525083	0.0000	0.47200642	0.0000
18	FACTOR8		18	0.0199	3.028	0.0023	0.00514658	0.0000	0.47350365	0.0000
19	FACTOR13		19	0.0188	2.858	0.0038	0.00504995	0.0000	0.47481320	0.0000
20	FACTOR7		20	0.0165	2.504	0.0107	0.00496663	0.0000	0.47598039	0.0000
21	FACTOR5		21	0.0161	2.442	0.0127	0.00488660	0.0000	0.47706508	0.0000
22	FACTOR5		22	0.0143	2.169	0.0281	0.00481677	0.0000	0.47796077	0.0000
23	FACTOR3		23	0.0113	1.787	0.0756	0.00475965	0.0000	0.47875969	0.0000
24	FACTOR13		24	0.0102	1.538	0.1394	0.00471093	0.0000	0.47942515	0.0000

TABLE 26

"STANDARDIZED DISCRIMINANT FUNCTION COEFFICIENTS"

FUNCTION	FUNC 1	FUNC 2	FUNC 3	FUNC 4	FUNC 5	FUNC 6	FUNC 7	FUNC 8
1	.227	.239	.222	-.344	.661	-.192	-.388	.182
2	.008	-.177	.081	-.096	-.036	-.090	.088	.290
3	-.558	-.312	.312	-.120	.276	.046	.007	-.595
4	.048	.086	.069	.065	-.017	-.144	-.209	.036
5	.043	.140	.063	-.225	.013	-.023	.389	.070
6	-.041	-.001	.181	-.065	.190	.086	-.014	-.261
7	-.017	.066	.057	.140	-.081	-.020	-.012	-.117
8	.064	.096	.043	-.092	-.018	-.076	-.101	.095
9	.050	.309	.074	.254	.223	.133	-.012	-.036
10	-.377	-.109	-.594	.170	.405	-.419	.361	.121
11	.116	.068	.029	-.083	-.047	-.113	-.036	-.046
12	-.027	.579	-.065	-.369	.087	.338	.451	-.088
13	-.071	.022	-.019	.921	.089	.268	.167	-.030
14	-.237	.460	.507	.609	.022	-.219	.060	.147
15	-.316	.694	-.331	-.044	-.061	-.040	-.512	-.255
16	-.208	-.023	.123	.053	-.001	-.054	.162	-.131
17	.178	.108	-.020	.047	-.053	-.268	.040	-.144
18	-.100	.217	.115	-.193	.358	.061	-.002	.026
19	.110	-.049	-.056	-.122	.100	-.054	-.099	-.392
20	.067	.256	.157	-.173	.009	.179	.363	-.092
21	-.716	-.158	.110	-.256	-.269	.236	-.159	.414
22	-.026	.077	.156	-.416	-.396	-.623	.048	-.076
23	.048	.927	.036	-.006	-.089	-.142	.206	-.072

TABLE 27

"RESULTS OF THE HT RATIO PERFORMED BY THE SIMULTANEOUS DISCRIMINANT"

CLUSTER GROUP	ANALYIS SAMPLE NUMBER OF CASES	ANALYIS SAMPLE NUMBER CORRECTLY CLASSIFIED	ANALYIS SAMPLE %	HOLD OUT SAMPLE NUMBER OF CASES	HOLD OUT SAMPLE NUMBER CORRECTLY CLASSIFIED	HOLD OUT SAMPLE %
1	262	260	99.2	272	269	98.9
2	58	45	77.6	67	52	77.6
3	101	93	92.1	80	68	85.0
4	64	51	79.7	64	48	75.0
5	6	6	100.0	3	3	100.0
6	28	27	96.4	38	33	86.8
7	32	32	100.0	26	22	84.6
8	5	5	100.0	1	1	100.0
9	62	56	90.3	53	45	89.9
		TOTAL	93.0			89.6

TABLE 28

"SUMMARY OF DUNCAN RESULTS"

	1	2	3	4	5	6	7	8	9
Meeting Needs	-.37	H 1.52	-.18	.13	-.23	-.12	-.23	L -1.16	.29
Presenting the Product	-.13	.09	-.02	.07	M .21	-.09	.01	-.10	.09
Estbl. Rel. w/Clients	-.07	.05	-.09	-.02	.08	-.06	-.08	.06	.05
Meetings/Conf.	-.32	-.02	.09	-.03	H 1.38	.22	H+ 2.37	L -.91	-.18
Making Sales Calls	-.13	.07	.02	.01	-.18	-.08	-.03	+.09	-.05
Phoning	-.21	-.02	-.19	.18	.16	.06	-.02	-.19	.52
Pricing & Shipping	-.06	.08	-.03	-.03	L -.32	-.10	.02	-.18	.05
Providing Closure	-.03	-.10	.02	.04	-.11	-.24	.11	-.49	-.07
Miscellaneous 1	-.11	-.01	.15	.06	.20	.08	.02	.03	-.06
Prospecting and Closing	-.05	.01	-.06	-.14	.23	-.14	.01	.37	.17
Beginning Pre Approach	.07	-.28	.25	-.79	-.63	.19	.22	-.42	.06
Travelling	-.18	-.07	-.09	-.26	.29	H .27	-.61	.39	-.26
Equipping Clients	-.10	.09	-.10	.22	-.40	-.04	.15	-.05	.05
Handling Orders	-.19	-.54	-.01	-.04	-.11	-.16	-.07	H 2.07	H 1.56
Working in Office	.03	-.00	-.06	-.14	.09	-.14	.01	-.10	.04
Entertaining	-.39	-.16	H 1.51	.07	.00	-.20	-.24	-.11	-.18
Planning	-.12	-.13	.06	-.15	H 1.03	.06	-.08	H 7.20	.17
Coordinating the Product	-.08	-.09	.05	-.03	H .57	-.21	H .43	L -.56	.11
Miscellaneous 2	-.11	.10	.07	.20	L -.82	-.04	.01	-.09	-.06
Communication	-.24	.53	.14	-.16	.08	.03	.29	.42	.60
Selling To Consumer	-.05	.03	-.15	.19	L 1.29	.07	.37	H 1.27	-.08
Pricing	-.05	-.29	-.12	-.04	-.76	-.19	-.11	-.63	H .61
Travelling To Office	-.06	-.20	-.00	.02	5.60	.08	.19	.27	-.12
Servicing Technical Product	-.47	-.20	-.13	H 1.51	.33	-.10	-.15	.41	-.10
Helping Clients Plan	-.08	-.15	.02	.29	-.04	.13	.04	.03	-.05

TABLE 29

"COMPARISON OF CLUSTER DEMOGRAPHICS - 'TIME"

	CLUSTER 1	CLUSTER 2	CLUSTER 3	CLUSTER 4	CLUSTER 5	CLUSTER 6	CLUSTER 7	CLUSTER 8	CLUSTER 9	OVERALL
SEX*										
o Male	96.0%	86.7%	98.3%	96.8%	88.9%	100.0%	96.6%	100.0%	95.6%	96.1%
o Female	4.0%	13.3%	1.7%	3.2%	11.1%	0.0%	3.4%	0.0%	4.4%	3.9%
RACE*										
o White	98.3%	98.4%	99.4%	98.4%	77.8%	98.4%	96.6%	100.0%	95.6%	98.0%
o Black	1.7%	1.6%	0.6%	1.6%	22.2%	1.6%	3.4%	0.0%	4.4%	2.0%
MARITAL										
o Married	86.6%	76.6%	85.2%	83.5%	66.7%	90.6%	81.0%	50.0%	80.5%	83.7%
o Single	13.4%	23.4%	14.8%	6.5%	33.3%	9.4%	19.0%	50.0%	19.5%	16.3%
AGE*	41.8	38.7	42.9	40.4	42.7	42.6	39.1	37.8	39.8	41.2
PREVIOUS JOBS	1.7	1.6	1.7	1.7	1.6	1.6	1.8	2.0	1.9	1.7
TIME WITH COMPANY	9.3	8.4	10.3	8.4	14.4	9.0	8.5	6.5	8.1	9.1
TIME WITH PRESENT SALES JOB	7.9	7.3	8.8	7.3	11.9	8.0	7.4	5.5	6.7	7.7
EDUCATION	15.2	15.1	15.3	15.0	13.9	14.8	14.9	15.5	15.2	15.1
INCOME	$40,500	$32,800	$42,900	$34,900	$58,200	$38,300	$38,800	$36,600	$41,800	$39,900

* Significant at a .05 level.
** Significant at a .01 level.

Identification of the Composition of Cluster

The last analytical step consisted of running a crosstab of clusters by the demographic variables. Table 29 indicates each clusters demographic scores against the average. As can be seen in Table 29, unlike the frequency scale, very few of the demographic items were significantly different.

Cluster 1 - "Industry Norms" (n=533)

Cluster 1 contained 533 respondents and proved to be difficult to interpret. There were only two factors that had positive means Factor 11 (Pre-Approach) had a mean of .07, while Factor 15 (office work) had a mean of .03. These two factors alone indicate very little about the Cluster 1 salesperson. Examination of the highest negative means proved to be somewhat more useful. For example, Cluster 1 salespeople had a mean of -.47 which was by far, the lowest mean of all clusters. This would indicate that these salespeople spend little time with technical products. Also, very little time is spent on entertaining as compared to other clusters (-.39). Another large negative mean was Factor 1 (Service the Account). Servicing the account contained activities such as "study clients needs", "modify product", "follow-up orders", "tailor deliveries to meet needs of clients", and "order samples". These salespeople spend little time working conferences (-.32).

Cluster 1 was represented by 44 companies and comprised at least one-third of every SIC category. Furthermore, the Cluster 1 salesperson was almost identical to the overall industry average as can be seen in Table 29.

The negative means closest to 0 and the positive means all dealt with the selling process. Factors entitled "closure", "pre-approach", and "selling process" were all basic steps in a "typical" textbook sales call. Thus, the Cluster 1 salesperson makes sales calls as his primary activity based on length of time. He/she can be found in most companies and industries, and demographically match the industry norm. Basically, this sales rep is typical of every industry and no single activity stands out.

Cluster 2 - "Trade Sellers" (n=125)

The second cluster scored a mean of 1.52 on Factor 1 (meeting needs). These activities include study the needs of clients, study trends, modify product to meet client's needs, tailor delivery for client and providing feedback. The Cluster 2 salesperson also does a great deal of communication through the "mail". Even though .08 is a low mean, the Cluster salesperson scored the highest on "Pricing and Shipping". Factor 7 was comprised of looking up price in catalogue and handling shipment problems. These salespeople are also involved in either stocking the shelves or installing the product. Even though the "sales call" means were very close for almost all clusters, the .07 mean was highest for Cluster 2.

Cluster 2 salespeople had the lowest mean (-.54) on order taking. They also would appear to do very little traveling to office (-.20). The category "Technical Products" had a low mean of -.20; thus the products would appear to be non-technical. These salespeople in comparison to others, spend very little time submitting bids, but as mentioned previously "look up price in catalogue".

The following SIC groups had the highest percentage of the 32 companies represented in Cluster 2.

SIC	DESCRIPTION	# REPS	% INDUSTRY	% CLUSTER
27	Printing	19	15%	53%
34	Fab Metal	20	16%	15%
36	Electrical Equipment	12	10%	8%
37	Transportation	18	14%	21%

The typical Cluster 2 salesperson tended to be younger than other clusters (38.7), and fewer married salespeople (76.6).

The Cluster 2 salesperson spends time determining needs, made use of mail, quoted prices from catalogues, did some stocking and made sales calls. These salespeople were represented in a large number of companies with motor parts and books having the highest representation. Lastly, this cluster tended to be younger than average and had the highest percentage of females.

Cluster 3 - "Missionary - Entertainers" (n=182)

"Entertaining" was the strongest factor in Cluster 3. (1.57). The "pre-approach" also was important to Cluster 3 (.25). They also kept their office in order, and coordinated activities with support people. "Meetings and Conferences" scored a low positive mean (.09) as did "Planning" (.06).

Cluster 3 did not have any large negative numbers but had several small negative means. These salespeople are not as conscience of clients needs (-.18), nor do they spend as much time with technical products (-.13). They, like Cluster 2, spend little time bidding for contracts (-.12). "Equipping

clients" which includes stocking also had a low mean (-.10). Cluster 3 and Cluster 6 were very similar in activities performed. The primary difference was Cluster 3's score on the factor "Entertaining". The Cluster 3 salesperson spends a lot of time entertaining.

Again, there were at least 30 companies represented in the cluster. The largest populations or percentages are represented by the following:

SIC	DESCRIPTION	# REPS	% INDUSTRY	% CLUSTER
31	Leather - (Shoes)	32	18%	23%
32	Stone, Glass, Concrete	18	10%	24%
34	Fab. Metals	24	13%	18%
35	Machinery	19	10%	9%
36	Electronic Equip.	21	12%	14%

The Cluster 3 Salesperson was very close to the norm in all demographic categories. Their income was $42,900 which was $3400 above the industry average.

In summary, the cluster salesperson spent a lot of time entertaining. They also spent a lot of time with pre-approach activities. Technical products were not well represented by the Cluster 3 salesperson.

Cluster 4 - "Technical Services" (n=129)

The fourth cluster spent the most time working with technical products" (Factor 24). Factor 24 closely resembled the same activities as did Factor 3 in the "frequency scale". Examples of Factor 24 include: ordering repair parts, be present during repairs, providing maintenance, and training clients to use the product. Cluster 4 salespeople also aided their clients in planning, as well as providing seminars and speeches. These salespeople also spent

time in the installation of the product. Servicing the account was also an important factor concerning time in the activities of Cluster 4.

The Cluster 4 salesperson did not spend much time in the actual selling process as did others. Travel also was not a major time consumer. Even though the phone had a positive mean, the other communication "mail" had a negative mean.

The following SIC codes were the most numerous in representation:

SIC	DESCRIPTION	# REPS	% INDUSTRY	% CLUSTER
30	Rubber-Plastics	16	13%	16%
34	Fab. Metals	15	12%	11%
35	Machinery	54	42%	26%
36	Electrical Equip.	13	10%	9%
38	Measuring Instr.	14	11%	20%

Demographically, the Cluster 4 salesperson was very close to the study average with the exception of income. These salespeople earned $34,900, $4600 below the norm.

In summary, Cluster 4, salespeople spent their time working with technical products, primarily heavy machinery. Some of there activities included installation, ordering parts, training, and maintenance. They did not spend very much of their time in the actual "selling" process.

Cluster 5 - "Technical Sellers - Distributors" (n=9)

This cluster was a group of outliers that was too large to be removed. The Fastclus procedure removes outliers of 1 to 3 people and all previously outliers had been single clusters or a pair comprising a cluster. Group 5 only had 9 representatives. Seven of these representatives were from one

company. These 9 salespeople attended and worked conferences. They also spent a great deal of time planning their daily routines and daily sales activities. They also showed how their product line coordinated with the customers existing line.

The Cluster 5 salesperson sold to middlemen. They did not work semimars, nor provide "bids". These salespeople did not spend as much time in equipping (stock) the client with the product. They did not spend much time servicing the account.

There were only three companies and two SIC groups represented in the cluster. SIC 314 (shoes) accounted for 8 of 9 of the sales reps.

Eight of the nine salespeople were male and seven of nine white. These nine people averaged 14.4 years with their company, well above average. This group had the least education (13.89 years), yet the most income ($58,200).

Cluster 6 - "Missionary" (n=66)

The Cluster 6 salesperson spends a great amount of time traveling (.27). They also attend and work conferences and meetings (.22). These salespeople perform "pre-approach" activities but do not perform actual "selling" activities. "Helping clients plan" is a major activity in terms of time.

"Order-taking" and "closure of sales" are not primary functions of this group in terms of time. The missionary salesrep also does not spend as much time with bids, entertaining, or servicing technical products.

Of the 28 companies represented in this group, twenty had only one or two representatives. The percentage of representatives for each company was equal to or less than 10% in every case but three.

The company representatives were exclusively male in this study, but otherwise conformed to the overall norm. They do not take orders or close sales. However, they do travel, attend conferences, and help clients plan. A missionary salesperson sells "goodwill" and does not take orders or "sell" in the common sense. Also, indicative of the missionary salesperson is the small percentage of each company's salesforce represented in this cluster.

Cluster 7 - "Trade Show-Conference Sellers" (n=58)

The seventh cluster had a number of strong positive means. The highest mean was for working conferences and meets (2.37). The Cluster 7 salesperson also attempts to match his/her product or modify it to meet customer's needs. Distributors are not important in the channel for this cluster. However, mail does play an important part of time spent by this salesperson. The salesperson does stock the shelves for his clients, and also performs the basic selling functions.

The salespeople of Cluster 7 spend less time traveling and entertaining. Less time is also spent on the submission of bids and selling technical products. In addition, they do not spend a lot of time examining the needs of clients.

Of the 21 companies represented in Cluster 7, 13 had only 1 or 2 representatives. As in Cluster 6, no one single company was heavily represented in this cluster. However, the clothing industry had the two largest representatives. Companies 56 and 14 accounted for 12 of the 58

representatives. The other single largest contributor was 11 salespeople from the shoe industry.

Cluster 7 was very close to the study norm in every demographic category. Moreover, with the exception of Cluster 1, this cluster matched up the closest with the average studywide salesperson.

Cluster 8 - "Technical Sellers - Manufacturing" (n=6)

Cluster 8 was the second cluster to be in effect an outlier group. All six people are from different companies although four are from the same SIC group. These six salespeople had a mean of 2.07 on the factor "order". They also had high means on "travel" and the "selling process". Cluster 8 salespeople sell technical products to customers, and travel extensively in town and out of town.

These six salespeople do not service accounts nor work conferences. "Bids" and establishing prices are of little importance to these salespeople.

Four of the six men sell machinery, while the other two sell clothing. One problem that arises with this cluster concerns the two men who sell clothing, and yet Cluster 8 seems to be concerned with technical products. Clearly, this is an inconsistency unless there is a very unique clothing line. However, the six are order takers that travel a great deal and are involved in the selling process.

Cluster 9 - "Order Takers" (n=115)

The ninth and last cluster are also order takers. A great deal of time is spent entertaining and using the phone and mail. These salespeole also spend

time planning their daily routine. Servicing accounts is also a primary function. To a lesser extent, these salespeople are product oriented. This would include: introducing new products, review the company's new products, decide which products to take on call, fill out activity reports, and read company literature. These salespeople also spent time establishing a relationship with their clients through flattery, public relations and even politiking.

Very little time is spent traveling, either in town or out. Also these salespeople do not spend time working conferences. Last, the product line is basically non-technical.

Some of the variety of SIC groups contained within Cluster 9 include:

SIC	DESCRIPTION	# REPS	% INDUSTRY	% CLUSTER
23	Apparel	19	17%	16%
30	Rubber-Plastics	11	10%	11%
31	Leather	11	10%	8%
34	Fab. Machinery	32	28%	15%
36	Electrical Equip.	17	15%	12%

DISCUSSION AND CONCLUSIONS OF TIME SCALE

The sales taxonomy based on the time scale contained nine classifications. The profiles of each clustered salesperson was examined in terms of demographics and activities performed. This section presents a brief summary of each cluster and then compares and contrasts the time scale versus the frequency scale.

Cluster 1 - "INDUSTRY NORM" - The first cluster contained 533 salespeople. These sales reps had no single activity that stood out. The only activities that were positive were selling oriented, but with a very low factor score mean. This category was very average in demographic profiles and were represented strongly in every industry.

Cluster 2 - "TRADE SELLERS" - The trade salesperson examined needs, handled pricing and shipping, performed stocking or installing if necessary and made sales calls. These salespeople were not order takers.

Cluster 3 - "MISSIONARY - ENTERTAINERS" - The third group of salespeople were heavy entertainers. They studied the needs of clients and worked closely with support people. Conferences were frequently attended or worked. However, they did not service accounts nor stock products.

Cluster 4 - "TECHNICAL SERVERS" - The technical salesperson serviced technical products, and served the account. Planning was a time-consuming aspect of the job.

Cluster 5 - "TECHNICAL SELLERS - DISTRIBUTORS" - The technical seller performed selling functions. They also attended conferences, coordinated products and sold to middlemen.

Cluster 6 - "MISSIONARY" - The sixth group also frequently attended conferences, traveled, and helped clients plan. They did not take orders, close sales or service accounts.

Cluster 7 - "TRADE SHOW-CONFERENCE SELLERS" - This cluster were selling oriented, primarily to manufacturers. These salespeople worked conferences, were product oriented and occasionally stocked or installed the product.

Cluster 8 - "TECHNICAL SELLERS - MANUFACTURING" - This group was almost identical to Cluster 5. The only difference was that this cluster sold to manufacturers.

Cluster 9 - "ORDER TAKERS" - This salesperson took orders, did a lot of planning, serviced the account and made sales calls.

Discussion of the Time and Frequency Scales and a Comparison to the Apriori Scheme

There were a number of differences in the results of the two scales. The time scale had the elimination of over thirty items after factor analysis, while the frequency scale lost only 14. The time scale had 80 outliers, the frequency scale only 20. These two facts were responsible for some of the differences in results. The time scale was much more complex and took more time and thought to fill out than did the frequency scale. As a result, the time scale was much more apt to have missing information than was the frequency scale.

The time scale examined activities performed by salespeople in regard to the time the activity took to perform. The scale ranged from zero time to 72 hours. The frequency scale had eight possible answers (0 to 8 on the scale).

Both scales were relatively successful at correctly classifying respondents into their proper categories. Discriminant analysis was run using a holdout sample and also using all respondents in the analysis in both cases, the frequency scale was better at correctly classifying respondents. The frequency scale correctly classified 94.7% while the time scale correctly classified 90.7% as can be seen in Table 30. The frequency scale was much more consistent in correct classification with 7 of 10 categories scoring at least 92% correct classification. The lowest correct classification was 86.

The time scale had only 4 categories score above the .90 percentile and two of those were the smallest categories. The lowest hit ratio was a .76% in category 4. Thus, in terms of correct classification the frequency scale was better and more consistent.

TABLE 30

COMPARISON OF HIT RATIOS

	TIME			FREQUENCY	
	Respondents	Percent Correct		Respondents	Percent Correct
1	534	100%	1	152	93%
2	99	79%	2	238	99%
3	163	90%	3	129	98%
4	97	76%	4	48	92%
5	9	100%	5	130	97%
6	59	89%	6	122	95%
7	49	84%	7	98	86%
8	6	100%	8	52	88%
9	93	81%	9	100	89%
10	—	—	10	129	99%
TOTAL		90.7%			94.7%

The two scales had a number of similarities including identical or very similar factor compositions. The two scales also had similar categories in many respects. Both scales had an industry norm category although the time scale's had double the amount of respondents.

A second similarity in the categories concerned the technical salespeople. Both scales had three technical categories but there were differences. The two scales both contained a strong "technical server" category. However, "time" had two small technical sellers categories with the only difference being the presence or absence of a distributor. The frequency scale had a large technical seller that had a distributor. The third technical category was a specialized technical seller that sold a specialized product to the ultimate consumer. Thus even though there were differences in the two scales on technical products, there was also a great deal of similarity.

The missionary category was also different. The time scale contained two categories of missionary salespeople with the primary difference, being the presence or absence of entertaining. The frequency scale included a boundary spanner who was primarily a politicker.

The remaining categories were similar in basic content but had some differences in which activities were emphasized. The frequency scale contained a category entitled servicers which was not found in the time scale. Table 30 indicates the results of a crosstab run with the time scale categories versus frequency categories. The results indicated that similar categories did not necessarily contain the same respondents. The industry norm category had the largest overlap, along with the missionary - boundary spanner categories. The servicers category in the frequency scale had a relatively heavy overlap with the time's technical servicer.

TABLE 31

"CROSSTAB OF FREQUENCY SCALE VERSUS THE TIME SCALE"

		FREQUENCY											
	Time	Tech Sellers Dist 1	Missionary 2	Account Sellers 3	Tech Sellers MFC 4	Trade Sellers 5	Trade Show 6	Ind. Norms 7	Tech Servicers 8	Boundary Spanner 9	Servicers 10		
Norms-Dist	1	69	95	45	19	52	56	70	25	42	45	=	518
Trade Sellers	2	16	30	9	3	20	20	6	1	11	4	=	120
Miss. Entert.	3	22	50	31	9	15	13	5	8	16	10	=	179
Tech Servicers	4	19	16	2	8	11	5	6	8	8	36	=	119
Tech Sellers-Dist	5	0	0	7	1	0	0	0	0	0	0	=	8
Missionary	6	6	12	12	3	7	7	2	3	3	8	=	63
Trade Show	7	6	6	8	3	13	9	0	1	5	7	=	58
Tech Sellers-MFC	8	2	0	1	0	0	1	0	0	1	1	=	6
Order Takers	9	14	15	9	4	5	10	17	10	18	10	=	112
	TOTAL	130	163	240	132	52	134	128	114	59	113	=	1,265

TABLE 32

"COMPARISON OF APRIORI GROUPS TO FREQUENCY, TIME FACTORS"

	APRIORI		FREQUENCY		TIME	
1.	Sales Presentations	(9)	Selling Function	(10)		
2.	Supervise Equipment	(6)	Service the Product	(11)*	Service Tech. Products	(6)
3.	Expedite Orders	(8)	Handling Orders	(6)*	Handling Orders	(5)
4.	Training	(6)	Training	(3)		
5.	Promotion	(5)				
6.	Price and Credit	(8)	Money Matters	(6)		
7.	Calls	(6)	Preparing for Calls	(4)	Making Sales Calls	(7)
8.	Design Product	(6)				
9.	Socialize	(5)	Entertaining	(5)*	Entertaining	(3)
10.	Planning	(4)	Planning	(2)**	Planning	(2)
11.	Sales Meetings	(6)				
12.	Conferences & Conventions	(4)	Attending Conferences	(6)	Meetings & Conferences	(5)
13.	Deliveries	(5)	Deliveries	(2)		
14.	Travel	(6)	Out of Town Travel	(2)	Travelling	(4)*
15.	Distributors	(2)	Distributors	(2)**		
17.	Study	(4)	Keep Current	(6)		
18.	Reports	(5)				
19.	Work Schedule	(3)	Office Work	(3)*	Working in Office	(2)
20.	Use of Mail	(4)	Communicating	(2)	Communicating	(3)*
21.	Use of Phone	(4)	Telephoning	(4)**	Telephoning	(4)**
22.	Trouble-Shoot	(2)				
23.	Politicking	(3)	Politicking	(3)**		
34.	Miscellaneous	(7)	Miscellaneous	(4)	Miscellaneous	(6)

*More closely matches the Apriori scheme.
**Identical to Apriori scheme.

The frequency scale proved to be the best scale in terms of matching the A priori conceptualization. The A priori scheme hypothesized that 24 factors would emerge. In reality, the frequency and time scales both produced 25 factors. Table 32 indicates time and frequency categories that were very similar or identical to those proposed in the A priori conceptualization. The frequency scale was identical to the A priori scheme in four categories while very similar in 15 other categories. The time scale, on the other hand, was identical in only one case and similar in only 10 other categories.

In summary, the frequency scale had fewer problems beginning with the collection of data through the analysis section. The frequency scale had a higher correct classification of respondents. However, there were still a large number of similarities in the final results. These similarities ranged from factor solutions that were the same to categories that were the same or similar.

CHAPTER FIVE

REVIEW, CONCLUSIONS AND IMPLICATIONS

The fifth chapter of this dissertation reviews the justification of the study and briefly summarizes the methodology of the research study, along with a summary of the results. Conclusions and implications are then discussed. finally, the chapter outlines areas recommended for future research.

Review of the Study

The purpose of this dissertation research was to create a classification of specific selling activities. These selling activities would be used to develop a taxonomic system to differentiate "types" of salespeople.

In order for marketing to grow as a science or at least in a scientific manner, the discipline must develop more classification and taxonomic systems. Other disciplines, particularly the hard or physical sciences, base their existence on taxonomies. However, taxonomies are not merely a physical science tool, but rather have been used extensively by some social sciences such as psychology, sociology and political science.

Marketers have recognized the need for taxonomies but have been slow to respond to the call. However, in the past decade marketing (including the sub-discipline of sales management) has evolved and matured. As such, the importance of having a science of sales management has been recognized.

Unfortunately, sales managers still rely primarily on their experience and not on a field of knowledge presented by academicians. Thus, the goal of this research was to develop a basic taxonomy based on the activities that a salesperson performs in their daily occupation.

The methodology of the study was comprised of a number of stages. The first stage was the assembling of an exhaustive list of activities that salespeople perform in their job. This step was accomplished through a series of personal interviews and focus groups.

The second stage was the design and implementation of a sample. The manufacturing section of the SIC code was used as the population. Eight hundred letters were sent to companies drawn by a systematic sampling process. Fifty-four companies agreed to participate, and completed all aspects of the study. These 54 companies were then sent a copy of the questionnaire which the companies duplicated and distributed to their sales-force. The questionnaire was 12 pages in length and contained the 121 sales activities along with two scales (time and frequency). The scales were used in measuring the time and frequency each activity took.

The third and last stage was the analysis of the data and the formulation of the taxonomy. There were several multivariate techniques involved in the analysis. The first technique consisted of factor analyzing the 121 activities. The factor solution produced 25 factors for both the time and the frequency scales. The second analytical step was a cluster analysis which grouped salespeople into similar clusters based on their factor scores. The next step became the linking of clusters and factors. In other words, it could be stated, for example, that cluster one frequently engages work activities from Factors 2, 5 and 12. This linking was accomplished through the use of

ANOVA and a Duncan's multiple range test. Finally a crosstab of cluster by demographics identified the sales people in each cluster.

Summary of Results

The focus groups, personal interviews and literature review produced 121 sales activities. These activities were examined in two scales measuring frequency of performance of the activity and measuring the "average" time to perform the activity. The frequency scale was factor analyzed and ultimately produced 25 factors. The 25 factors were given the following labels:

1. The Selling Function
2. Entertaining
3. Servicing the Product
4. Servicing the Account
5. Handling Orders
6. Miscellaneous
7. Delivering
8. Training/Recruiting
9. Attending Conferences/ Meetings
10. Handling Company Money Matters
11. Travelling Out of Town
12. Politicking
13. Preparing For Calls
14. Phoning
15. Working With Distributors
17. Working Seminars
18. Communicating
19. Working From Home
20. Working From Office
21. Working On Site
22. Planning
23. Working With Support People
24. Working With Management
25. Keeping Current

The second major step was the cluster analysis which was used to group salespeople into clusters based on their factor scores. A Fastclus clustering procedure was used and it produced 10 clusters consisting of the following number of respondents in each cluster:

Cluster	(1)	-	163	Cluster	(6)	-	128
	(2)	-	240		(7)	-	115
	(3)	-	132		(8)	-	59
	(4)	-	51		(9)	-	113
	(5)	-	134		(10)	-	130

A stepwise discriminant analysis was run to determine which factors were most discriminating in terms of predicting cluster membership. All 25 factors were significant at a .05 level and therefore were useful in the discriminant function. The simultaneous discriminant analysis indicated that 94.7% of the salespeople had been correctly classified into their cluster groups.

The fourth analytical technique was analysis of variance with a Duncans multiple range test. The ANOVA indicated significant differences at a .05 level for every factor. The Duncans multiple range test indicated where the significant differences occurred. Thus, at this point each cluster had been identified in terms of activities most frequently performed. The last step was a crosstab of demographics by cluster groups.

The following is a brief synopsis of each cluster including its label and basic description.

Cluster 1 - "TECHNICAL SELLERS - DISTRIBUTOR" - This category is characterized by salespeople who service a technical product. These salespeople are "selling" oriented, and prospecting is important. Lastly, these salespeople are selling to distributors or middlemen.

Cluster 2 - "MISSIONARY" - This category's main function is entertaining. The support sales rep also assists management with market studies and research. They examine trends and attempt to determine the needs of clients. However, these salespeople are not "sellers" or order takers.

Cluster 3 - "ACCOUNT SELLERS" - The sales rep is primarily concerned with selling and taking orders, but they also service the accounts with promotion. These sales reps do a lot of travel, entertaining and working conferences. This category was characterized by a shoe salesperson.

Cluster 4 - "TECHNICAL SELLERS-MANUFACTURERS" - This category is very similar to Cluster 1, with two primary exceptions. First, this group does not deal with distributors but rather the ultimate consumer. Secondly, the salesperson sold specialized products such as dental and medical instruments.

Cluster 5 - "TRADE SELLERS" - This sales rep will service their accounts and sell primarily to wholesalers or retailers. However, they do very little prospecting. The beer salesman would be a typical example of the trade seller.

Cluster 6 - "TRADE SHOW AND CONFERENCE SELLERS" - The Trade Show seller's main function is selling. They work from their home, travel, and work conferences. They also handle a lot of company money matters. A typical representative of this group would be a book representative.

Cluster 7 - "INDUSTRY NORMS" - This is perhaps the most interesting group in that they are non-descript. Ony two factors had positive means and their means were very low (order taking and stocking). The vast majority of the companies had a representative in this group. The demographic profile was very average in terms of the industry norm. This group may be very important in that they do not fit any category. All previous studies have forced salespeople into a "meaningful" category. This group may very well indicate that some salespeople do not fit existing patterns.

Cluster 8 - "TECHNICAL SERVICERS" - This is the third category concerned with a technical salesperson. This group differs in that they go "on site". They service the product and to a lesser degree, service the account. Pricing is a frequently performed function including the submission of bids.

Cluster 9 - "BOUNDARY SPANNERS" - This group differs from the others in that politiking is their primary activity, both within the company and with customers. They work closely with support servicers people, do some training, and communicate through mailand phone.

Cluster 10 - "SERVICERS" - This category services the account, and to a lesser degree, they service the product. They travel, handle company money matters, and do a lot of planning.

The time scale's format was identical to the format of the frequency scale. The factor analysis also produced 25 factors and they consisted of the following:

1. Determining Needs
2. Presenting the Product
3. Establishing Relationships With Clients
4. Meetings and Conferences
5. Making Sales Calls
6. Phoning
7. Pricing and Shipping
8. Providing Closure
9. Miscellaneous I
10. Prospecting and Closing
11. Beginning Pre-Approach
12. Travelling
13. Equipping Clients
14. Handling Orders
15. Working In Office
16. Entertaining
17. Planning
18. Coordinating the Products
19. Miscellaneous
20. Communicating
21. Selling to Ultimate Consumers
22. Pricing
23. Travelling to Office
24. Helping Clients Plan
25. Servicing Technical Products

The cluster analysis produced 9 cluster groups containing the following number of sales reps.

(1)	-	533	(4)	-	129	(7)	-	58
(2)	-	125	(5)	-	9	(8)	-	6
(3)	-	182	(6)	-	66	(9)	-	115

The stepwise discriminant analysis showed that all 25 factors were significant at a .05 level and thus were beneficial to the discriminant function. The simultaneous discriminant analysis indicated a 90.7 correct classification of cluster.

Analysis of variance and Duncans multiple range test indicated significant differences among all of the factors. Each cluster is presented below with a brief discussion.

Cluster 1 - "INDUSTRY NORM" - The first cluster contained 533 salespeople. These sales reps had no single activity that stood out. The only activities that were positive were selling oriented, but with a very low factor score mean. This category was very average in demographic profiles and were represented strongly in every industry.

Cluster 2 - "TRADE SELLERS" - The trade salesperson serviced accounts, handled pricing and shipping, performed stocking or installing if necessary and made sales calls. These salespeople were not order takers.

Cluster 3 - "MISSIONARY - ENTERTAINERS" - The third group of salespeople were heavy entertainers. They studied the needs of clients and worked closely with support people. Conferences were frequently attended or worked. However, they did not service accounts nor stock products.

Cluster 4 - "TECHNICAL SERVERS" - The technical salesperson served technical products, and served the account. Planning was a time-consuming aspect of the job.

Cluster 5 - "TECHNICAL SELLERS - DISTRIBUTORS" - The technical seller performed selling functions. They also attended conferences, coordinated products and sold to middlemen.

Cluster 6 - "MISSIONARY" - The sixth group also frequently attended conferences, traveled, and helped clients plan. They did not take orders, close sales or service accounts.

Cluster 7 - "TRADE SHOW-CONFERENCE SELLERS" - This cluster were selling oriented, primarily to manufacturers. These salespeople worked conferences, were product oriented and occasionally stocked or installed the product.

Cluster 8 - "TECHNICAL SELLERS - MANUFACTURING" - This group was almost identical to Cluster 5. The only difference was that this cluster sold to manufacturers.

Cluster 9 - "ORDER TAKERS" - This salesperson took orders, did a lot of planning, serviced the account and made sales calls.

Conclusions of Study

The study indicated that salespeople do differ in the daily activities that are performed on the sales jobs. The activities are diverse among a variety of industries, and even somewhat different among companies in the same industry. This diversity of activities can be taken a step further in that salespeople within the same company may perform a variety of different activities. An example of the diversity may be found in Cluster 7 (Industry Norm) of the frequency scale. These particular individuals were not significantly different from any group regarding the activities they performed. The demographic profile of this group was average in terms of the

study norm. However, more importantly, almost every company had at least one representative in this cluster group. Thus, not everyone in the same company nor industry perform the same activities.

The frequency scale proved to be a stronger scale than did the time scale. The frequency scale proved to be much closer to the A priori conceptualization established in this study. Also, the frequency scale was more efficient in classifying individual salespeople. The results also indicated that frequency was an easier concept for respondents to deal with than was time. Most of the respondents had very little problem in dealing with how frequently they perform an activity. However, the determination of how much "time" was involved performing the activity proved to be much more complex and difficult. As such, the quality of the responses (amount of missing data, complaints, notes from respondents) was not as good as the frequency scale.

The frequency scale identified ten groups or clusters that were similar to Newton and McMurray in some aspects, and yet, more importantly, several new categories were identified and discussed. The missionary, trade and technical categories were somewhat similar to the Newton and McMurray classifications, but differences did occur. The missionary salesperson still exists, but a new category entitled boundary spanners has emerged. The boundary spanner does a lot of politicking, both with clientele and with company people. They work frequently with support people, trainees and management. Perhaps, an explanation for the emergence of a boundary spanner position can be the emphasis in the last decade on communication, role clarity, and the development of long-term relationships with clientele.

The technical salesperson has undergone changes since Newton's study in 1971, and certainly since McMurray's study of 1962. This study indicated three types of technical salespeople, which possibly indicates a higher emphasis on the technical type of sale job. With the arrival of the computer age, communication advancements, and general improvement and complication in machinery, the technical sales rep is becoming more important. The technical sales rep may become even more diversified and commonplace as the 1990's approach.

This dissertation has expanded upon Newton's "trade seller" salesperson. Newton's trade seller primarily was concerned with selling and servicing distributors (wholesalers, retailers) but this left a large category unaccounted for. The salesreps who sold and serviced other manufacturers or institutions did not classify into any of the categories. Thus, the "account seller" does many of the same activities as the trade seller but they work primarily with non-distribution people. In addition, a servicers category comprised salesreps who serviced both distributors and non-distributors, along with technical and non-technical products. Their major differentiation was the lack of emphasis on "selling" but rather keeping the client stocked with the product.

Another classification was a "trade show and conference seller". These individuals worked trade shows or conferences more frequently than any other group. They were selling-oriented and travelled very frequently. The trade show and/or conferences are important ways to contact a large group of prospects at one setting. As such, the activities of these individuals are different from any category that has previously been hypothesized.

The last group that has not been mentioned in any previous research was the "industry norms". This group is important in that they do not fit any

"established" class or group. They performed all activities at or about the industry average. Their demographic profile matched the study average. This does not mean that they are good or bad salesreps but rather that they perform each of the activities at an industry-wide average. Previous writings have forced all salesreps into categories. These norms may indicate that not everyone can be classified as a technical salesrep or a missionary salesrep, or any of the other categories.

The study, even though just a beginning step, indicates that a taxonomy can be developed for the discipline of sales management. Salespeople are different based on the job activities they perform and the frequency that these activities are performed.

Implications

One major contribution of this dissertation research is the fullfillment of an important theoretical requirement. In order for marketing (and more particular sales management), to progress in a scientific manner, there are certain requirements that must be met. In any discipline the theoretical basis of that discipline begins with classification and taxonomies. Hunt (1975) clearly states that classification schemata are fundamental in organizing and studying phenomenon. Furthermore, the discipline of sales has been slow in developing classification systems. The call for taxonomy's and classifications has been echoed by a number of people. Perhaps the most notable call was made by Churchill, Ford and Walker (1978, p. 39) who stated.

"What is needed is a taxonomy of specific selling activities involved in different types of sales jobs." Thus, the single most important contribution of the present research is the beginning development of a taxonomic system.

With the classification system, academia can now attempt to classify individual cases. For example, if there is a salesman who installs and maintains products in his daily activities, as well as oriented to selling and prospecting, then he can be classified as a "technical salesperson". Furthermore, the classification aids in summarization. This same salesman is classified into a category that typically is from SIC 34, 35 and 36. A further breakdown of the demographic profile could be provided as well.

Researchers have conducted studies without controlling for effects of different types of sales jobs. This has led to inconsistent research findings (Churchill, Ford, and Walker, 1981). In one study sociability proves to be important in determining job performance. A second study provides totally opposite results. One explanation for the contradiction (assuming the methodology was very similar) is provided in this dissertation taxonomy. People with particular traits and abilities may do well in Job A, but not in Job B. The taxonomy shows that Job A requires a lot of entertaining while B does little or no entertaining. Sociability may be highly correlated with entertaining. Thus, one salesperson may not be appropriate for all jobs. Each job should be analyzed by the activities the job requires. If a person enjoys entertaining, that individual may be more appropriately employed as a missionary salesperson as opposed to a trade seller. This dissertation research has identified the activities associated with the various types of industrial sales jobs.

Currently, the only classification of salespeople being extensively used in textbooks is by Derek Newton (1973), based on work done by Robert McMurry (1961). Newton stated that there are four classifications of salespeople including: 1) Trade Salesmen 2) New Business 3) Missionary and 4) Technical. Newton uses this classification in his research. The problem with the classification is it was never empirically tested, though extensively used in sales management texts. Newton and McMurray's work was and is important to the sales discipline. One important outcome of this dissertation research is the beginning empirically development of a classification system. The present research partially agrees with Newton but expands upon his classification and more importantly provides empirical evidence of different classes not yet examined.

Multi-firm, multi-industry studies have been relatively rare in the past. One important aspect of this study is the comparisions that can be made among companies and industries. This was a vital component in the development of a taxonomy. Also, it is useful in examining competing industries in terms of differences in their sales activities. For example, if a company has been successful, a competitor might find that they would improve with a change in emphasis on job activities. Company A might be entertaining frequently, whereas Company B rarely entertains.

This study not only benefits the academician but also the practitioner. It is important for the sales manager to know which activities his salesforce are performing, and compare them to an industry norm. Turnover has always been an expensive problem and part of turnover can be attributed to someone who is not comfortable with the activities that must be performed. If these activities are listed in the job description or in an interview the sales recruit

might be more apt to know if they have the aptitude and skill to perform the job. Management could also take the list of activities and apply it to their top salespeople to determine the frequency and time that is spent on the variety of activities.

Directions for Future Research

This study did not investigate all forms of selling. A logical extension of this study would be to do a follow-up using service salespeople. An examination of the service industry should contain a different set of activities. However, it would be of interest to examine a service oriented company versus a product oriented company. For example, a comparison could be made between an insurance salesperson and a computer salesperson. It would be important to determine how much of a difference in sales activities the tangible product makes.

A similar study might be conducted in the retail salesforce. The retail salesforce might be even more diverse than an industrial salesforce. The set of activities would obviously be considerably different from the industrial salesforce and probably from the service salesforce.

A third suggestion would be to make a comparision among salespeople in foreign countries and compare their activities to those of their American counterpart. This could be done using International companies or host country companies. In other words, does an American "trade seller" perform a different set of activities in Germany as opposed to the United States.

Another area of potential would be a closer examination of the "technical salesperson" categories. Previous studies have assumed only one type of

technical salesperson. This study indicated three. A study could be conducted using just a technical salesforce and refactor on the sales activities. This might indicate a further delineation of the technical categories. The technical category might be much more complex and complicated than previously thought.

One important follow-up to this study would be to determine a psychographical or personality profile of each category. This study established the activities performed by each class and the demographics of each group, but not a psychological profile. For example, it might be hypothesized that a "New Business" salesperson would have to be more aggressive than a "technical salesperson".

This study has laid a foundation for the development of sales classification. The classifications and future research if implemented should lead to a clearer understanding of the sales job. This study represents a beginning step in the development of sales as a scientific discipline.

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APPENDIX 1
"Letter of Cooperation"

Department of Marketing
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LOUISIANA STATE UNIVERSITY AND AGRICULTURAL AND MECHANICAL COLLEGE
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504 388-6684

Dear Sir,

I am writing to inform you about a current dissertation endeavor that I believe you may be interested in, and to ask if you would be willing to participate in this project. I think you will agree that you will receive invaluable information about your salesforce which would normally cost your firm several thousand dollars to obtain.

I am currently attempting to complete my Ph.D. degree and have an interest in personal selling and sales management. It is my belief that this current project will be very helpful in understanding the sales manager's job in the future. The project consists of two main parts which are briefly outlined below.

Part I - To examine the relationships among salespersons performance, job satisfaction, and organizational commitment. I think you would be very interested in this part. We would provide you with information such as:

- How satisfied or dissatisfied are your salespeople with pay? Opportunities for promotion? Training? Supervision? etc.?

- Which aspects of your salesperson's job do they value most? Pay? Promotion? etc.?

- What can you do to improve the sales job so as to reduce turnover, dissatisfaction, and to increase performance?

Part II - To develop a classification of sales jobs based on selling activities. This is more of a theoretical nature and probably would not be of much value to you. It is, however, very important to researchers and is important to me in order to complete my dissertation.

My purpose in writing you is to seek you cooperation with this nationwide project. All I ask of you is that you allow me to survey your salesforce. The only expense you would incur is that we ask you to duplicate the questionnaire that I will mail to you and then distribute it to your salesforce. We are <u>not</u> asking any kind of payment or contribution.

We will provide you with the complete results of the survey and, in addition, allow you to make comparisons with other unnamed firms in your industry. Your firm will be completely anonymous. I will assign your company a number and only you and I will be able to identify your firm. I'm sure you realize that this information, if collected for you by a consultant, would cost several thousand dollars. All we ask is your help and cooperation.

To give you a summary of what I have in mind I'll outline the major points of my proposal as follows:

1) You agree to participate and I will then send you a copy of the survey questionnaire for your approval.

2) You duplicate and distribute the questionnaire to your salesforce who complete it and mail it to me.

3) When I have recieved all the responses from a variety of firms within your industry I will send you a copy of the results of the research. This will give you important information about your own salesforce and you will be able to compare your firm with other firms in your industry. Only you and I will be able to identify your firm -- all participating firms will remain completely anonymous.

Enclosed is a post card. Please check the appropriate category indicating your interest and mail it back to me with any comments or questions. Please feel free to write me or call me (504-388-8684) so that we may discuss this further if you wish to do so.

Of course, I need cooperation from individuals such as yourself to do meaningful research in business. This project offers you the unique opportunity to make a contribution to business research, but to gain invaluable information about your salesforce. I look forward to hearing from you and look forward to working with you.

Sincerely,

Bill Moncrief
Instructor in Marketing & Ph.D. Candidate

BM/aes

Enclosure

APPENDIX 2
"Questionnaire"

CONFIDENTIAL SALESPERSON'S QUESTIONNAIRE

Your are very important to the success of this research project. Please take the time to complete this questionnaire. I realize it is long but you should find it interesting. It is very important that you complete the questionnaire in its entirety. We will not be able to use any of your responses if you leave out any part of the questionnaire. Please be sure you have answered each question. Thanks again for your cooperation.

PART 1. HOW WELL DO YOU PERFORM YOUR JOB?

A sales representative's performance is measured in many ways. Comparing yourself to other salesmen in your company doing work similar to your, how do you rate yourself in terms of quantity and quality of performance?

Overall quantity and quality of performance; check one of the following:

Near the top	Above average	About average	Below average
Better than 75%	Better than 50%	Better than 25%	Below 25%

PART 2. IS YOUR JOB CLEAR TO YOU?

Please read over the following questions. After carefully reading the questions, CHECK THE SPACE BELOW THE QUESTION WHICH MOST ACCURATELY REFLECTS YOUR FEELINGS. Remember that there are no right or wrong answers to the questions. The main interest is in your own personal feelings. Place a check in one of the spaces after each question.

1. How clear are you about the limits of your authority in your present job?
   (Not at all clear) ____ ____ ____ ____ ____ ____ (Perfectly clear)
2. Do you feel you are always as clear as you would like to be about what you have to do on your job?
   (Not at all clear) ____ ____ ____ ____ ____ ____ (Perfectly clear)
3. Do you feel you are always as clear as you would like to be about how you are supposed to do things on your job?
   (Not at all clear) ____ ____ ____ ____ ____ ____ (Perfectly clear)
4. In general, how clearly defined are the policies and the various rules, procedures, and regulations of the company that affect your job?
   (Not at all clear) ____ ____ ____ ____ ____ ____ (Perfectly clear)
5. In general, how clearly defined are the rules, policies and procedures of your department that affect your job?
   (not at all clear) ____ ____ ____ ____ ____ ____ (Perfectly clear)

PART 3. WHAT DO YOU DO ON YOUR JOB?

The following is a list of activities that you may or may not perform in your particular job.

For each activity we want to know three things: (1) Do you perform the activity or not? and if you perform the activity, (2) How frequently do you perform it in a month's time and (3) How many hours in a day do you spend performing the activity.

First, please indicate whether you do or do not perform the activity by placing an "X" on the appropriate space.

Example: Submit bids Yes _X_
No ____

If you answered "Yes" then indicate on the 1 to 7 scale the relative frequency in a month's time that you perform the activity with "1" being infrequently and "7" being frequently.

Example: If your job calls for you to submit bids quite frequently in a month's time then you might mark an "X" through the 6 as shown below.

Submit bids Yes _X_
No ____ Infrequently 1 2 3 4 5 6 7 Frequently

However, if you seldom submit bids, then you might mark through the "2" with your "X" mark.

The scale below the 1-7 scale measures the actual amount of time you spend performing the activity in a day's time. On any given day if you perform an activity, about how long does it take you to complete the activity. Each mark on the scale represents 15 minutes. If the activity takes longer to complete than 3 hours, specify the length. Place an "X" on the appropriate time that it takes to perform the activity.

As an example,

Submit bids 0 hr , , , 1 hr , , , 2 hr , , , 3 hr (Specify) ___

To summarize this example, the completed answers would appear as follows:

Example:

Submit bids Yes ____ Infrequently 1 2 3 4 5 6 7 Frequently
No ____ 0 hr , , , 1 hr , , , 2 hr , , , 3 hr (Specify) ___

Plan daily routine	Yes ___	Infrequently 1 2 3 4 5 6 7 Frequently
	No ___	0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ___
Plan selling activities	Yes ___	Infrequently 1 2 3 4 5 6 7 Frequently
	No ___	0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ___
Help company management design sales plan	Yes ___	Infrequently 1 2 3 4 5 6 7 Frequently
	No ___	0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ___
Help clients plan	Yes ___	Infrequently 1 2 3 4 5 6 7 Frequently
	No ___	0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ___
Search out leads for prospects	Yes ___	Infrequently 1 2 3 4 5 6 7 Frequently
	No ___	0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ___
Call on existing accounts	Yes ___	Infrequently 1 2 3 4 5 6 7 Frequently
	No ___	0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ___
Call on potential accounts	Yes ___	Infrequently 1 2 3 4 5 6 7 Frequently
	No ___	0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ___
Call on new accounts	Yes ___	Infrequently 1 2 3 4 5 6 7 Frequently
	No ___	0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ___
Identifying the person with authority to make purchasing decisions	Yes ___	Infrequently 1 2 3 4 5 6 7 Frequently
	No ___	0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ___
Make probing phone calls	Yes ___	Infrequently 1 2 3 4 5 6 7 Frequently
	No ___	0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ___
Prepare sales presentation	Yes ___	Infrequently 1 2 3 4 5 6 7 Frequently
	No ___	0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ___
Design or prepare visual displays to be used for the presentation	Yes ___	Infrequently 1 2 3 4 5 6 7 Frequently
	No ___	0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ___
Select which products to take on call	Yes ___	Infrequently 1 2 3 4 5 6 7 Frequently
	No ___	0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ___
Make sales presentation	Yes ___	Infrequently 1 2 3 4 5 6 7 Frequently
	No ___	0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ___
Conduct demonstrations of product	Yes ___	Infrequently 1 2 3 4 5 6 7 Frequently
	No ___	0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ___
Use some type of "aid" in presentation	Yes ___	Infrequently 1 2 3 4 5 6 7 Frequently
	No ___	0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ___
Predict closure dates	Yes ___	Infrequently 1 2 3 4 5 6 7 Frequently
	No ___	0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ___
Make closure and obtain order	Yes ___	Infrequently 1 2 3 4 5 6 7 Frequently
	No ___	0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ___
Overcome objections	Yes ___	Infrequently 1 2 3 4 5 6 7 Frequently
	No ___	0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ___
Sell to distributors/middlemen	Yes ___	Infrequently 1 2 3 4 5 6 7 Frequently
	No ___	0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ___
Sell to ultimate consumer	Yes ___	Infrequently 1 2 3 4 5 6 7 Frequently
	No ___	0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ___
Correct orders--find lost orders	Yes ___	Infrequently 1 2 3 4 5 6 7 Frequently
	No ___	0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ___
Expedite orders	Yes ___	Infrequently 1 2 3 4 5 6 7 Frequently
	No ___	0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ___
Handle back orders	Yes ___	Infrequently 1 2 3 4 5 6 7 Frequently
	No ___	0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ___
Order parts	Yes ___	Infrequently 1 2 3 4 5 6 7 Frequently
	No ___	0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ___
Order accessories	Yes ___	Infrequently 1 2 3 4 5 6 7 Frequently
	No ___	0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ___

Write-up orders	Yes ___	Infrequently 1 2 3 4 5 6 7 Frequently
	No ___	0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ___
Follow-up client's order	Yes ___	Infrequently 1 2 3 4 5 6 7 Frequently
	No ___	0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ___
Order samples	Yes ___	Infrequently 1 2 3 4 5 6 7 Frequently
	No ___	0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ___
Examine sites prior to installation	Yes ___	Infrequently 1 2 3 4 5 6 7 Frequently
	No ___	0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ___
Supervise installation of equipment	Yes ___	Infrequently 1 2 3 4 5 6 7 Frequently
	No ___	0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ___
Test equipment or product	Yes ___	Infrequently 1 2 3 4 5 6 7 Frequently
	No ___	0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ___
Be present during repairs or maintenance	Yes ___	Infrequently 1 2 3 4 5 6 7 Frequently
	No ___	0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ___
Provide customers with technical information on company products	Yes ___	Infrequently 1 2 3 4 5 6 7 Frequently
	No ___	0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ___
Learn about product by watching technician	Yes ___	Infrequently 1 2 3 4 5 6 7 Frequently
	No ___	0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ___
Research clients background	Yes ___	Infrequently 1 2 3 4 5 6 7 Frequently
	No ___	0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ___
Perform maintenance on products	Yes ___	Infrequently 1 2 3 4 5 6 7 Frequently
		0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ___
Study trends in market or trends of client	Yes ___	Infrequently 1 2 3 4 5 6 7 Frequently
	No ___	0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ___
Study clients procedures or needs	Yes ___	Infrequently 1 2 3 4 5 6 7 Frequently
	No ___	0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ___
Design product and/or systems to meet needs of client	Yes ___	Infrequently 1 2 3 4 5 6 7 Frequently
	No ___	0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ___
Show how product coordinates with clients existing line	Yes ___	Infrequently 1 2 3 4 5 6 7 Frequently
	No ___	0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ___
Introduce new products to clients	Yes ___	Infrequently 1 2 3 4 5 6 7 Frequently
	No ___	0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ___
Handle pricing and credit	Yes ___	Infrequently 1 2 3 4 5 6 7 Frequently
	No ___	0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ___
Submit price proposals/bids	Yes ___	Infrequently 1 2 3 4 5 6 7 Frequently
	No ___	0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ___
Look-up price in company catalogue	Yes ___	Infrequently 1 2 3 4 5 6 7 Frequently
	No ___	0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ___
Contact company personnel to determine price	Yes ___	Infrequently 1 2 3 4 5 6 7 Frequently
	No ___	0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ___
You alone determine price for product, independent of company/ catalogue	Yes ___	Infrequently 1 2 3 4 5 6 7 Frequently
	No ___	0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ___
Figure up bills	Yes ___	Infrequently 1 2 3 4 5 6 7 Frequently
	No ___	0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ___
Help clients find financing	Yes ___	Infrequently 1 2 3 4 5 6 7 Frequently
	No ___	0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ___
Collect past due accounts	Yes ___	Infrequently 1 2 3 4 5 6 7 Frequently
	No ___	0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ___
Handle shipment problems	Yes ___	Infrequently 1 2 3 4 5 6 7 Frequently
	No ___	0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ___
Tailor deliveries to customer needs	Yes ___	Infrequently 1 2 3 4 5 6 7 Frequently
	No ___	0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ___
Make deliveries	Yes ___	Infrequently 1 2 3 4 5 6 7 Frequently
	No ___	0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ___
Stock shelves with product	Yes ___	Infrequently 1 2 3 4 5 6 7 Frequently
	No ___	0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ___
Establish good relations with physical distributors	Yes ___	Infrequently 1 2 3 4 5 6 7 Frequently
	No ___	0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ___

Take inventory for client	Yes ___	Infrequently 1 2 3 4 5 6 7 Frequently
	No ___	0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ___
forecast demand	Yes ___	Infrequently 1 2 3 4 5 6 7 Frequently
	No ___	0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ___
Look for new sales reps	Yes ___	Infrequently 1 2 3 4 5 6 7 Frequently
	No ___	0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ___
Train new sales people	Yes ___	Infrequently 1 2 3 4 5 6 7 Frequently
	No ___	0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ___
Attend periodic training sessions	Yes ___	Infrequently 1 2 3 4 5 6 7 Frequently
	No ___	0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ___
Practice using product or new product	Yes ___	Infrequently 1 2 3 4 5 6 7 Frequently
	No ___	0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ___
Train customers to use equipment or product	Yes ___	Infrequently 1 2 3 4 5 6 7 Frequently
	No ___	0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ___
Teach safety instructions	Yes ___	Infrequently 1 2 3 4 5 6 7 Frequently
	No ___	0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ___
Provide feedback to superiors	Yes ___	Infrequently 1 2 3 4 5 6 7 Frequently
	No ___	0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ___
Receive feedback from clients	Yes ___	Infrequently 1 2 3 4 5 6 7 Frequently
	No ___	0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ___
Assist management in market surveys	Yes ___	Infrequently 1 2 3 4 5 6 7 Frequently
	No ___	0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ___
Provide information to other salespeople	Yes ___	Infrequently 1 2 3 4 5 6 7 Frequently
	No ___	0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ___
Attend local office sales meetings--weekly or monthly	Yes ___	Infrequently 1 2 3 4 5 6 7 Frequently
	No ___	0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ___
Attend regional or district sales meetings	Yes ___	Infrequently 1 2 3 4 5 6 7 Frequently
	No ___	0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ___
Attend sales conferences and conventions	Yes ___	Infrequently 1 2 3 4 5 6 7 Frequently
	No ___	0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ___
Work client conferences and conventions	Yes ___	Infrequently 1 2 3 4 5 6 7 Frequently
	No ___	0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ___
Provide seminars and/or speakers for clients	Yes ___	Infrequently 1 2 3 4 5 6 7 Frequently
	No ___	0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ___
Make guest speeches	Yes ___	Infrequently 1 2 3 4 5 6 7 Frequently
	No ___	0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ___
Review your companies new products	Yes ___	Infrequently 1 2 3 4 5 6 7 Frequently
	No ___	0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ___
Read company literature	Yes ___	Infrequently 1 2 3 4 5 6 7 Frequently
	No ___	0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ___
Read trade publications	Yes ___	Infrequently 1 2 3 4 5 6 7 Frequently
	No ___	0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ___
Review and monitor competitor's products	Yes ___	Infrequently 1 2 3 4 5 6 7 Frequently
	No ___	0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ___
Fill out reports on sales activities	Yes ___	Infrequently 1 2 3 4 5 6 7 Frequently
	No ___	0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ___
Fill out expense accounts	Yes ___	Infrequently 1 2 3 4 5 6 7 Frequently
	No ___	0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ___
Fill out purchase orders	Yes ___	Infrequently 1 2 3 4 5 6 7 Frequently
	No ___	0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ___
Fill out credit forms	Yes ___	Infrequently 1 2 3 4 5 6 7 Frequently
	No ___	0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ___
Fill out questionnaires	Yes ___	Infrequently 1 2 3 4 5 6 7 Frequently
	No ___	0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ___

Take clients to lunch	Yes ___ No ___	Infrequently 1 2 3 4 5 6 7 Frequently 0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ___
Throw parties for clients	Yes ___ No ___	Infrequently 1 2 3 4 5 6 7 Frequently 0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ___
Entertain clients with leisure activities (golf, fishing, etc.)	Yes ___ No ___	Infrequently 1 2 3 4 5 6 7 Frequently 0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ___
Take clients out for a drink	Yes ___ No ___	Infrequently 1 2 3 4 5 6 7 Frequently 0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ___
Take clients to dinner (evening meal)	Yes ___ No ___	Infrequently 1 2 3 4 5 6 7 Frequently 0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ___
Take clients on site to review product in use.	Yes ___ No ___	Infrequently 1 2 3 4 5 6 7 Frequently 0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ___
Work "after hours"	Yes ___ No ___	Infrequently 1 2 3 4 5 6 7 Frequently 0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ___
Work from home	Yes ___ No ___	Infrequently 1 2 3 4 5 6 7 Frequently 0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ___
Spend night/nights on road	Yes ___ No ___	Infrequently 1 2 3 4 5 6 7 Frequently 0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ___
Set-up appointments through mail	Yes ___ No ___	Infrequently 1 2 3 4 5 6 7 Frequently 0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ___
Send Christmas cards, calendars, etc. to clients	Yes ___ No ___	Infrequently 1 2 3 4 5 6 7 Frequently 0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ___
Send out memos	Yes ___ No ___	Infrequently 1 2 3 4 5 6 7 Frequently 0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ___
Write letters	Yes ___ No ___	Infrequently 1 2 3 4 5 6 7 Frequently 0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ___
Travel to office	Yes ___ No ___	Infrequently 1 2 3 4 5 6 7 Frequently 0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ___
Travel out of town	Yes ___ No ___	Infrequently 1 2 3 4 5 6 7 Frequently 0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ___
Travel in town	Yes ___ No ___	Infrequently 1 2 3 4 5 6 7 Frequently 0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ___
Travel with supervisors	Yes ___ No ___	Infrequently 1 2 3 4 5 6 7 Frequently 0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ___
Travel with trainees	Yes ___ No ___	Infrequently 1 2 3 4 5 6 7 Frequently 0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ___
Load vehicle with product, demonstrators, etc.	Yes ___ No ___	Infrequently 1 2 3 4 5 6 7 Frequently 0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ___
Give orders/requests to company support people	Yes ___ No ___	Infrequently 1 2 3 4 5 6 7 Frequently 0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ___
Coordinate activities with company support people	Yes ___ No ___	Infrequently 1 2 3 4 5 6 7 Frequently 0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ___
Check in with your supervisor	Yes ___ No ___	Infrequently 1 2 3 4 5 6 7 Frequently 0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ___
Keep office in order	Yes ___ No ___	Infrequently 1 2 3 4 5 6 7 Frequently 0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ___
File	Yes ___ No ___	Infrequently 1 2 3 4 5 6 7 Frequently 0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ___
Keep track of invoices	Yes ___ No ___	Infrequently 1 2 3 4 5 6 7 Frequently 0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ___
Do company public relations work	Yes ___ No ___	Infrequently 1 2 3 4 5 6 7 Frequently 0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ___
Politiking within your company	Yes ___ No ___	Infrequently 1 2 3 4 5 6 7 Frequently 0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ___

Politiking outside your company	Yes ____	Infrequently 1 2 3 4 5 6 7 Frequently
	No ____	0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ____
Flatter clients	Yes ____	Infrequently 1 2 3 4 5 6 7 Frequently
	No ____	0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ____
Set-up point of purchase displays	Yes ____	Infrequently 1 2 3 4 5 6 7 Frequently
	No ____	0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ____
Distribute flyers, brochures	Yes ____	Infrequently 1 2 3 4 5 6 7 Frequently
	No ____	0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ____
Set-up exhibitions for trade shows	Yes ____	Infrequently 1 2 3 4 5 6 7 Frequently
	No ____	0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ____
Handle local advertising	Yes ____	Infrequently 1 2 3 4 5 6 7 Frequently
	No ____	0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ____
Phone office for orders, messages	Yes ____	Infrequently 1 2 3 4 5 6 7 Frequently
	No ____	0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ____
Phone for service/maintenance	Yes ____	Infrequently 1 2 3 4 5 6 7 Frequently
	No ____	0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ____
Phone to set-up appointments	Yes ____	Infrequently 1 2 3 4 5 6 7 Frequently
	No ____	0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ____
Phone to follow-up on calls	Yes ____	Infrequently 1 2 3 4 5 6 7 Frequently
	No ____	0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ____
Determine legalities--check government regulations	Yes ____	Infrequently 1 2 3 4 5 6 7 Frequently
	No ____	0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ____
	Yes ____	Infrequently 1 2 3 4 5 6 7 Frequently
	No ____	0 hr . . . 1 hr . . . 2 hr . . . 3 hr (Specify) ____

PART 4. ARE YOU SATISFIED WITH YOUR JOB?

Normally you have a variety of complex feelings and opinions about your work. However, you may not always express them. You may be very satisfied or dissatisfied with certain characteristics of your job, but never express this feeling. There are many reasons, for instance, difficulty in describing your feelings, possible embarrassment or fear of consequences.

Feelings are important--expressed or not. The following inventory provides an opportunity to express your feelings and opinions about these fears or concerns.

WORK RAPIDLY BUT ANSWER ALL STATEMENTS

Do not spend too much time on any one statement. If you cannot decide definitely about a statement, mark the answer you feel is most like your opinion and go on to the next statement. Some of the statements may not be worded exactly the way you would like them. However, answer them the best way you can. Be sure to mark every statement.

FILLING OUT THE INVENTORY

The inventory has been designed so that it will take a minimum amount of your time to complete. It employs a series of statements about various aspects of your job. Please read each statement carefully and decide how you feel about it. You will agree with some statements and you will disagree with others. To help you express your opinions, you are offered five possible answers to each statement. For example:

1. Suppose you feel in no uncertain terms that your sales territory is too small; you would place a check mark as follows:

	STRONGLY AGREE	AGREE	NEITHER AGREE NOR DISAGREE	DISAGREE	STRONGLY DISAGREE
My sales territory is too small	X	___	___	___	___

2. Suppose you feel, although not strongly, that you would rather work in a small town than a large city; you would place a check mark as follows:

	STRONGLY AGREE	AGREE	NEITHER AGREE NOR DISAGREE	DISAGREE	STRONGLY DISAGREE
I would rather work in a large city than a small town	___	___	___	X	___

Some of the items in the inventory may appear to be similar to you. Do not try to remember how you checked similar items earlier in the questionnaire. Make each item a separate and independent judgment. Work at a fairly high speed through this questionnaire. Do not worry or puzzle over individual items. It is your first impressions, the immediate "feelings" about the items, that we want. On the other hand, please do not be careless, because we want your true impressions.

	STRONGLY AGREE	AGREE	NEITHER AGREE NOR DISAGREE	DISAGREE	STRONGLY DISAGREE
1. My supervisor is tactful	___	___	___	___	___
2. Management keeps us in the dark about things we ought to know	___	___	___	___	___
3. My pay is high in comparison with what others get for similar work in other companies	___	___	___	___	___
4. My supervisor is up-to-date	___	___	___	___	___
5. Management is progressive	___	___	___	___	___
6. My work is creative	___	___	___	___	___
7. My customers respect my judgment	___	___	___	___	___
8. My customers are intelligent	___	___	___	___	___

	STRONGLY AGREE	AGREE	NEITHER AGREE NOR DISAGREE	DISAGREE	STRONGLY DISAGREE
9. My customers are interested in what I have to say	___	___	___	___	___
10. The company has an unf ir promotion policy	___	___	___	___	___
11. My work gives a sense of accomplishment	___	___	___	___	___
12. The people I work with get along well together	___	___	___	___	___
13. My opportunities for advancement are limited	___	___	___	___	___
14. My boss has taught me a lot about sales	___	___	___	___	___
15. My customers live up to their promises	___	___	___	___	___
16. My work is valuable	___	___	___	___	___
17. Our sales goals are set by the higher-ups without considering market conditions	___	___	___	___	___
18. My customers are trustworthy	___	___	___	___	___
19. Management really knows its job	___	___	___	___	___
20. My fellow workers are stimulating	___	___	___	___	___
21. I have plenty of freedom on the job to use my own judgment	___	___	___	___	___
22. My pay doesn't give me much incentive to increase my sales	___	___	___	___	___
23. My sales manager really tries to get our ideas about things	___	___	___	___	___
24. This company operates efficiently and smoothly	___	___	___	___	___
25. My fellow workers are selfish	___	___	___	___	___
26. My sales manager has the work well organized	___	___	___	___	___
27. My boss does a good job of helping sales representatives develop their own potential	___	___	___	___	___
28. My customers are fair	___	___	___	___	___
29. There are plenty of good jobs here for those who want to get ahead	___	___	___	___	___
30. My pay is low in comparison with what others get for similar work in other companies	___	___	___	___	___
31. My sales manager has always been fair in his dealings with me	___	___	___	___	___
32. Our home office isn't always cooperative in servicing our customers	___	___	___	___	___

		STRONGLY AGREE	AGREE	NEITHER AGREE NOR DISAGREE	DISAGREE	STRONGLY DISAGREE
33.	My boss doesn't seem to try very hard to get our problems across to management	___	___	___	___	___
34.	I'm satisfied with the way employee benefits are handled here	___	___	___	___	___
35.	We have a real competitive advantage in selling because of the quality of our products	___	___	___	___	___
36.	The people I work with help each other out when someone falls behind or gets in a tight spot	___	___	___	___	___
37.	This is a dead-end job	___	___	___	___	___
38.	Sometimes when I learn of management's plans, I wonder if they know the territory situation at all	___	___	___	___	___
39.	My fellow workers are boring	___	___	___	___	___
40.	The company sales training is not carried out in a well-planned program	___	___	___	___	___
41.	In my opinion the pay here is lower than in other companies	___	___	___	___	___
42.	My customers expect too much from me	___	___	___	___	___
43.	Management is weak	___	___	___	___	___
44.	My job is often dull and monotonous	___	___	___	___	___
45.	I am highly paid	___	___	___	___	___
46.	I have confidence in the fairness and honesty of management	___	___	___	___	___
47.	My fellow workers are sociable	___	___	___	___	___
48.	My job is exciting	___	___	___	___	___
49.	My boss really takes the lead in stimulating sales effort	___	___	___	___	___
50.	My work is satisfying	___	___	___	___	___
51.	My supervisor is intelligent	___	___	___	___	___
52.	I seldom know who really makes the purchase decisions in the companies I call upon	___	___	___	___	___
53.	Management here is really interested in the welfare of employees	___	___	___	___	___
54.	I'm really doing something worthwhile in my job	___	___	___	___	___

		STRONGLY AGREE	AGREE	NEITHER AGREE NOR DISAGREE	DISAGREE	STRONGLY DISAGREE
55.	My sales manager is too interested in his own success to care about the needs of employees	___	___	___	___	___
56.	Compared with other companies employee benefits here are good	___	___	___	___	___
57.	My fellow workers are pleasant	___	___	___	___	___
58.	My fellow workers are obstructive	___	___	___	___	___
59.	My income provides for luxuries	___	___	___	___	___
60.	The people I work with are very friendly	___	___	___	___	___
61.	My fellow workers are loyal	___	___	___	___	___
62.	Promotion here is based on ability	___	___	___	___	___
63.	I feel that the company is highly aggressive in its sales promotional efforts	___	___	___	___	___
64.	My sales manager gets the sales personnel to work together as a team	___	___	___	___	___
65.	My fellow workers are intelligent	___	___	___	___	___
66.	My sales manager gives us credit and praise for work well done	___	___	___	___	___
67.	I am unproductive in my work	___	___	___	___	___
68.	My selling ability largely determines my earnings in this company	___	___	___	___	___
69.	Sales representatives in this company receive good support from the home office	___	___	___	___	___
70.	My customers are inaccessible	___	___	___	___	___
71.	My work is challenging	___	___	___	___	___
72.	Regular promotions are the rule in this company	___	___	___	___	___
73.	Management here sees to it that there is cooperation between departments	___	___	___	___	___
74.	My sales manager lives up to his promises	___	___	___	___	___
75.	My sales manager sees that we have the things we need to do our jobs	___	___	___	___	___
76.	My customers are well organized	___	___	___	___	___
77.	I'm paid fairly compared with other employees in this company	___	___	___	___	___
78.	My customers blame me for problems that I have no control over	___	___	___	___	___
79.	My job is routine	___	___	___	___	___
80.	My sales manager knows very little about his job	___	___	___	___	___

		STRONGLY AGREE	AGREE	NEITHER AGREE NOR DISAGREE	DISAGREE	STRONGLY DISAGREE
81.	My opportunities for advancement are reasonable	___	___	___	___	___
82.	My work is useless	___	___	___	___	___
83.	My customers are unreasonable	___	___	___	___	___
84.	My fellow workers are responsible	___	___	___	___	___
85.	My income is adequate for normal expenses	___	___	___	___	___
86.	My customers are friendly	___	___	___	___	___
87.	I am very much underpaid for the work that I do	___	___	___	___	___
88.	I can barely live on my income	___	___	___	___	___
89.	There isn't enough training for sales representatives who have been on the job for a while	___	___	___	___	___
90.	Management ignores our suggestions and complaints	___	___	___	___	___
91.	My customers are loyal	___	___	___	___	___
92.	My customers are understanding	___	___	___	___	___
93.	I have a good change for promotion	___	___	___	___	___
94.	Management fails to give clear-cut orders and instructions	___	___	___	___	___
95.	My job is interesting	___	___	___	___	___

PART 5. HOW DO YOU COMMUNICATE WITH YOUR SALES MANAGER?

Below you will find a list of statements dealing with the communication between you and your sales manager. Please consider each statement and indicate the extent to which you agree or disagree with each statement by placing an "X" in the appropriate space.

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	Don't Know
1. My sales manager presents me with sound ideas for improving my performance on the job	___	___	___	___	___	___
2. The frequency of communication between my sales manager and myself is adequate	___	___	___	___	___	___
3. My sales manager provides useful information to me	___	___	___	___	___	___
4. My sales manager encourages two-way communication between him/her and myself	___	___	___	___	___	___
5. My sales manager encourages me to make suggestions to him/her	___	___	___	___	___	___
6. My sales manager effecively uses face to face communication with me	___	___	___	___	___	___
7. My sales manager effectively uses telephone communication in dealing with me	___	___	___	___	___	___
8. I am receptive to ideas and information provided by my sales manager	___	___	___	___	___	___
9. I am able to use ideas and information provided by my sales manager to improve my job performance	___	___	___	___	___	___

PART 6. HOW DO YOU FEEL ABOUT YOUR SALES MANAGER?

Below you will find a list of characteristics for describing your sales manager. Please consider each characteristic and indicate to what extent you feel the various characteristics apply to your sales manager.

I feel that my sales manager is:
(For each characteristic, check one space only)

	Extremely	Very	Quite	Only Slightly	Not at All	Don't Know
Trustworthy	___	___	___	___	___	___
Respectable	___	___	___	___	___	___
Dependable	___	___	___	___	___	___
Reliable	___	___	___	___	___	___
Reputable	___	___	___	___	___	___

PART 7. DESCRIBE YOUR RELATIONSHIP WITH YOUR SALES MANAGER.

Below you will find a list of reasons why people do what their sales manager requests. After reading each statement, indicate how often that statement is the reason you do what your sales manager requests. Consider your immediate supervisor to be your sales manager.

	Almost Always	Usually	Occasionally	Seldom	Never	Don't Know
1. My sales manager recommends pay increases for me	___	___	___	___	___	___
2. My sales manager is a successful salesperson	___	___	___	___	___	___
3. I do what my sales manager asks because she/he is the boss	___	___	___	___	___	___
4. My sales manager and I express similar attitudes toward our jobs	___	___	___	___	___	___
5. I do what my sales manager asks because he/she has a legitimate right to ask me	___	___	___	___	___	___
6. My sales manager threatens to fire or discipline me when I fail to meet sales performance goals	___	___	___	___	___	___
7. I follow my sales manager's directions because of the authority given to him/her	___	___	___	___	___	___
8. My sales manager provides me with useful knowledge about the company's policies and procedures	___	___	___	___	___	___
9. My salesmanager praises me for effective selling performances	___	___	___	___	___	___
10. My sales manager meets the qualifications for his/her job	___	___	___	___	___	___
11. I identify with my salesmanager's success	___	___	___	___	___	___
12. My sales manager provides rewards for me	___	___	___	___	___	___
13. My sales manager treats me in an understanding way	___	___	___	___	___	___
14. My sales manager demonstrates that she/he has adequate experience as a manager	___	___	___	___	___	___
15. My sales manager recommends his/her sales representatives for promotion	___	___	___	___	___	___
16. My sales manager treats me like a friend	___	___	___	___	___	___
17. My sales manager applies unreasonable pressure to get results from sales persons	___	___	___	___	___	___
18. My sales manager reminds me of sales quotas I need to meet	___	___	___	___	___	___
19. My sales manager compliments me	___	___	___	___	___	___
20. My sales manager acts in a competent manner	___	___	___	___	___	___

		Almost Always	Usually	Occassion-ally	Seldom	Never	Don't Know
21.	My sales manager provides me with useful knowledge about the company's products and/or service	___	___	___	___	___	___
22.	I like my sales manager.	___	___	___	___	___	___
23.	My sales manager does not compliment his/her sales persons when they deserve it	___	___	___	___	___	___
24.	My sales manager acts like a successful manager should	___	___	___	___	___	___
25.	My sales manager provides me with information on selling techniques and practices	___	___	___	___	___	___
26.	My sales manager tries to coerce me to do what she/he wants me to do	___	___	___	___	___	___
27.	My sales manager uses moderate management practices	___	___	___	___	___	___
28.	My sales manager likes me	___	___	___	___	___	___

PART 8. CONFIDENTIAL BACKGROUND INFORMATION.

The following information is necessary for purposes of analysis of data obtained. Your individual responses will not be disclosed to anyone in your company. Only "averages" will be given to your company. This questionnaire is strictly confidential!

What is your birthdate? Month _____ Year _____

What is your sex? Male _____ Female _____

What is your race? Black _____ White _____ Other _____

Which of the following indicates your present marital status:

Single _____
Married _____
Separated/divorced _____
Widowed _____
Other _____

How many children do you have?

None _____ Two _____ Four or more _____

One _____ Three _____

How many previous full-time sales jobs have you held? (not counting present job)

_____

How long have you been with your present company, regardless of position held?

Years _____ Month _____

How long have you been with your present company in a sales position?

Years _____ Month _____

What is the highest level of formal education which you have completed?

_____ years

Please indicate your current annual income for your sales job. (State your annual income in terms of the nearest $100. For example, if you make $12,850, you would round to $12,800; if you make $12,825, you would round to $12,800.)

_____

Thank you for your cooperation. Please mail this questionnaire in the envelope provided. If no envelope was provided, mail to: Bill Moncrief, Department of Marketing, College of Business Administration, LSU, Baton Rouge, Louisiana 70803.

Thanks again!

APPENDIX 3

"ACTIVITIES AND THEIR CODE NAMES"

1. Routine - Plan daily routine.
2. Sellact - Plan selling activities
3. Splan - Help company management design sales plan.
4. Heplan - Help clients plan.
5. Search - Search out leads for prospects.
6. Callex - Call on existing accounts.
7. Callpo - Call on potential accounts.
8. Callnew - Call on new accounts.
9. Idaut - Identifying the person with authority to make purchasing decisions.
10. Verify - Verify commissions.
11. Spres - Prepare sales presentation.
12. Displ - Design or prepare visual displays to be used for the presentation.
13. Select - Select which products to take oncall.
14. Makepre - Make sales presentation.
15. Conduct - Conduct demonstrations of product.
16. Aid - Use some type of "aid" in presentation.
17. Predict - Predict closure dates.
18. Closure - Make closure and obtain order.
19. Over - Overcome objections.
20. Selld - Sell to distributors/middlemen.
21. Sellc - Sell to ultimate consumer.
22. Find - Correct orders--find lost orders.
23. Expd - Expedite orders.
24. Hand - Handle back orders.

25. Repart - Order repair parts.

26. Ordac - Order accessories.

27. Write - Write-up orders.

28. Follow - Follow-up client's order.

29. Sample - Order samples.

30. Sites - Examine sites prior to installation.

31. Instal - Supervise installation of equipment.

32. Test - Test equipment or product.

33. Be - Be present during repairs or maintenance.

34. Technif - Provide customers with technical information on company products.

35. Learn - Learn about product by watching technician.

36. Backgr - Research clients background.

37. Maint - Perform maintenance on products.

38. Trends - Study trends in market or trends in client.

39. Needs - Study clients procedures or needs.

40. Modify - Modify product and/or systems to meet needs of client.

41. Show - Show how product coordinates with clients existing line.

42. Intro - Introduce new products to clients.

43. Credit - Handle pricing and credit.

44. Bids - Submit price proposals/bids.

45. Lookp - Look-up price in company catalogue.

46. Contact - Contact company personnel to determine price.

47. You - You alone determine price of product, independent of company/catalogue.

48. Figure - Figure up bills.

49. Findd - Help clients find financing.

50. Pastdue - Collect past due accounts.

51. Ship - Handle shipment problems.

52. Tailor - Tailor deliveries to customer needs.

53. Deliv - Make deliveries.

54. Stock - Stock shelves with product.

55. Prdtr - Estabish good relations with physical distributors.

56. Inven - Take inventory for client.

57. Forcst - Forecast demand.

58. Nurep - Look for new sales reps.

59. Trainu - Train new sales people.

60. Attrn - Attend periodic training sessions

61. Using - Practice using product.

62. Trainc - Train customers to use equipment or product.

63. Teach - Teach safety instructions.

64. Profeed - Provide feedback to superiors.

65. Recfeed - Receive feedback from clients.

66. Survey - Assist management in market surveys.

67. Provinf - Provide information to other salespeople.

68. LSM - Attend local office sales meetings--weekly or monthly.

69. RSM - Attend regional or district sales meetings.

70. Sconf - Attend sales conferences and conventions.

71. Clconf - Work client conferences and conventions.

72. Semnar - Provide seminars and/or speakers for clients.

73. Speech - Make guest speeches.

74. Review - Review your companies new products.

75. Colit - Read company literatures.

76. Trade - Read trade publications.

77. Monitor - Review and monitor competitor's products.

78. Foact - Fill out reports on sales activities.

79. Foexp - Fill out expense accounts.

80. Fopo - Fill out purchase orders.

81. Focr - Fill out credit forms.

82. Qaire - Fill out questionnaires

83. Lunch - Take clients to lunch.

84. Party - Throw parties for clients.

85. Golf - Entertain clients with leisure activities (golf, fishing, etc.)

86. Drink - Take clients out for a drink.

87. Eat - Take clients to dinner (evening meal).

88. Onsite - Take clients on site to review product in use.

89. Afthr - Work "after hours"

90. Home - Work out of home.

91. Night - Spend night/nights on road.

92. Setup - Set-up appointments through mail.

93. Xmas - Send Christmas cards, calendars, etc. to clients.

94. Memo - Send out memos.

95. Letter - Write letters.

96. Office - Travel to office.

97. Travout - Travel out of town.

98. Travin - Travel in town.

99. Super - Travel with supervisors.

100. Travt - Travel with trainees.

101. Load - Load vehicle with product, demonstrators, etc.

102. Give - Give orders/requests to company support people.

103. Coord - Coordinate activities with company support people.

104. Checkin - Check in with your supervisor.

105. Keep - Keep office in order.

106. File - File.

107. Invoice - Keep track of invoices.

108. PR - Do company public relations work.

109. Bswi - Politiking within your company

110. Bswo - Politiking outside your company.

111. Flatter - Flatter clients.

112. Pop - Set-up point of purchase displays.

113. Flyer - Distribute flyers, brochures.

114. Shows - Set-up exhibitions for trade shows.

115. Ad - Handle local advertising

116. Phord - Phone office for orders, messages.

117. Phmtn - Phone for service/maintenance.

118. Phap - Phone to set-up appointments.

119. Phfuc - Phone to follow-up on calls.

120. Probe - Make probing phone calls.

121. Legal - Determine legalities--check government regulations.

VITA

William C. Moncrief III was born January 1, 1953 in Chattanooga, Tennessee. His parents are Mr. and Mrs. William C. Moncrief Jr. He graduated from Cleveland High School, in Cleveland, Tennesse in 1971. In May, 1975, he graduated with a Bachelor of Science degree from the University of Mississippi. He received a Master of Business Administration degree in August, 1978 from the University of Mississippi.

In the Fall of 1978, he began his doctoral work majoring in Marketing at Louisiana State University, where he is currently a candidate for the Doctor of Philosophy degree. He served as a teaching assistant from 1978 to 1980 and then as an instructor from 1980 to the Spring of 1982. In September of 1982, he assumed a position as Assistant Professor of Marketing at Texas Christian University.

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EXAMINATION AND THESIS REPORT

Candidate: William C. Moncrief III

Major Field: Business Administration

Title of Thesis: A Taxonomy for Industrial Salesforce Job Activities

Approved:

Major Professor and Chairman

Dean of the Graduate School

EXAMINING COMMITTEE:

Date of Examination:

May 16, 1983